

Navigating Workforce Needs: A Comprehensive Analysis of Nurse Competencies in Palawan

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ABSTRACT

This study determined the self-rated competency profiles of registered nurses in Palawan and examined the individual, organizational, and systemic factors influencing professional performance. A quantitative, cross-sectional correlational design was employed, involving 184 nurses from Level 1 and Level 2 hospitals, clinics, and academic institutions across Northern, Central, Southern, and island municipalities of Palawan. Data were collected using a structured self-administered questionnaire covering seven competency domains—Clinical Care, Leadership, Interpersonal Relationships, Legal and Ethical Practice, Professional Development, Teaching and Coaching, and Critical Thinking/Research Aptitude—along with perceived influencing factors. Stratified purposive sampling ensured representative participation, and data were analyzed using descriptive statistics, non-parametric tests, and multivariate logistic regression to identify predictors of self-rated competency. Findings reveal that nurses generally rated themselves as sufficiently competent, demonstrating strengths in patient-centered care, teamwork, ethical practice, mentoring, and information-seeking, while identifying areas for improvement in comprehensive health assessment, technological application, delegation, formal teaching, and research integration. Individual-level factors were the strongest predictors of self-rated competency, organizational supports reinforced these competencies, and sociocultural/systemic factors exerted moderate influence. The results highlight the interplay of personal motivation, institutional environment, and contextual challenges in shaping professional practice. These findings suggest that workforce development initiatives in Palawan should adopt a multi-level approach, including continuing professional development, structured mentorship, simulation-based experiential learning, leadership and interpersonal skills programs, and culturally responsive interventions. Addressing these factors can enhance nursing competence, optimize healthcare delivery, and guide evidence-based policy and human resource planning in clinical and academic settings.

Keywords: Nursing competency, Palaweno nurses, professional development, workforce planning, clinical care, leadership, organizational support

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CHAPTER 1

BACKGROUND AND LITERATURE REVIEW

INTRODUCTION

Nursing has long been recognized as a cornerstone of the healthcare system, both in the Philippines and worldwide (Robredo et al., 2022; Corpuz, 2023; Perpetual Help Medical Center, 2025). As a profession, nursing has evolved significantly from its traditional image of bedside care to a multidimensional field that demands technical proficiency, scientific reasoning, ethical judgment, and interpersonal sensitivity. This transformation has been driven by changes in global health needs, healthcare delivery models, and professional standards (Rodríguez-Pérez et al., 2022). Nurses today are no longer confined to hospitals; they work across a range of settings including public health institutions, academic institutions, industrial clinics, and community-

based organizations (Flaubert et al., 2021). In developing countries like the Philippines, where the healthcare system faces ongoing challenges in access, equity, and quality of service, the role of the nurse is particularly pivotal (Co et al., 2024).

Filipino nurses play a critical role in both domestic and international healthcare systems. Globally, they are highly regarded for their clinical competence, adaptability, and compassion (Corpuz, 2023). Locally, however, many nurses face systemic constraints, including under-resourced facilities, inequitable distribution of healthcare workers, and limited opportunities for professional development (Robredo et al., 2022)—factors that are especially evident in geographically isolated and disadvantaged areas like Palawan. As an archipelagic province composed of remote and

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hard-to-reach islands, Palawan presents unique logistical and institutional challenges in health service delivery. In such settings, the competency of healthcare professionals, particularly nurses, becomes an essential determinant of patient outcomes and system efficiency.

The Philippine Nursing Law (R.A. 877), as amended, mandates that for an individual to practice as a professional nurse, they must complete a Bachelor of Science in Nursing (BSN), be licensed, and be physically and mentally fit. Since 1983, the country has enforced a singular four-year collegiate BSN program, effectively phasing out the three-year, hospital-based training route, as institutionalized by the Commission on Higher Education through CHED Memorandum Order No. 14, Series of 2009 (Commission on Higher Education, 2009). The current curriculum emphasizes a broad set of competencies designed to meet the multifaceted demands of contemporary nursing practice. These include, among others, health promotion, disease prevention, clinical care, ethical practice, leadership, and research utilization. It also aims to foster a sensitive awareness of the country's health needs and to develop practitioners who are committed to addressing them through evidence-based and community-responsive approaches.

Despite the structured educational foundation provided by the BSN program, there remains considerable variation in the actual competencies demonstrated by nurses in practice. Competency in nursing is not merely defined by the completion of academic requirements or clinical hours but also by the continuing development of practical knowledge, critical thinking, communication skills, and leadership qualities (Mrayyan et al., 2023). Furthermore, a nurse's ability to provide quality care is often influenced by contextual variables such as work environment, institutional support, access to continuing education, and the sociocultural dynamics of the communities they serve (Ličen & Prosen, 2023). These influences are particularly pronounced in peripheral provinces where healthcare infrastructure and professional networks are limited.

Assessing the competencies of nurses is therefore not just a matter of evaluating individual performance, but of understanding how various internal and external factors interact to shape their professional effectiveness. For instance, Haddad and Geiger (2023) argued that while task-based skills such as medication administration or wound care are readily observable, more nuanced competencies—like ethical decision-making,

interdisciplinary collaboration, or patient advocacy—are harder to quantify and assess. This complexity is compounded by the lack of standardized frameworks that capture the full scope of nursing practice in diverse Filipino settings.

The use of the nursing process—an established method that includes assessment, planning, implementation, and evaluation—has long served as a foundational tool in nursing education and practice (Toney-Butler & Thayer, 2023). It also forms the basis for many competency evaluation models. However, not all health professionals, including nurses, consistently understand or apply the nursing process in ways that clearly correlate with patient outcomes (Tadzong-Awasum et al., 2022; Toney-Butler & Thayer, 2023). This gap in comprehension can lead to misinterpretation of what constitutes "good nursing care" and may obscure the links between specific nursing actions and health system performance (Zumstein-Shaha and Grace, 2023).

Moreover, the complexity of competency development in nursing necessitates a comprehensive analysis that includes individual, institutional, and systemic dimensions. At the individual level, factors such as age, experience, educational attainment, and personal motivation contribute to professional competence. At the organizational level, the presence or absence of supervision, training opportunities, leadership structures, and staffing policies can significantly enhance or constrain a nurse's ability to perform effectively. On a broader scale, sociocultural factors—such as community expectations, local governance, professional hierarchies, and geographic isolation—may reinforce or inhibit the development of professional competencies (Flaubert et al., 2021).

Given these realities, there is a pressing need to systematically assess the competency profiles of nurses working in complex, resource-constrained environments like Palawan. Understanding their strengths, limitations, and the contextual factors that influence their practice is critical for evidence-based human resource planning, policy formulation, and capacity-building initiatives. As the country continues to pursue universal health coverage and strengthen its decentralized healthcare systems, investments in nursing workforce development must be guided by empirical data, not assumptions. This study is thus anchored in the need to generate a comprehensive profile of nursing competencies in Palawan, drawing attention to sectoral differences, developmental needs, and strategic opportunities for professional support. By shedding light on the

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real-world capabilities and challenges faced by nurses, this research intends to contribute to the broader goal of improving healthcare outcomes through strategic workforce planning and institutional reform.

REVIEW OF RELATED LITERATURE

This chapter presents the review of related literature written by Filipinos and their foreign counterparts. Hand in hand, studies undertaken by researchers in the Philippines as well as in foreign countries substantiated the study at hand.

The Role of Learning and Professional Competence in Nursing Practice

In modern healthcare systems, professional competence among nurses is not only expected—it is essential (Flaubert et al., 2021). Competence encompasses a dynamic combination of cognitive, technical, ethical, and interpersonal abilities that enable nurses to deliver safe, high-quality care in diverse and often complex clinical environments (Mrayyan et al., 2023). It is widely acknowledged that nursing competence is not static; rather, it evolves continually through structured education, clinical exposure, and lifelong learning (Mlambo et al., 2021).

Central to this evolving competence is the process of continuous professional development (CPD). The World Health Organization (WHO) and various national nursing bodies emphasize CPD as a requirement for maintaining and enhancing competence throughout a nurse's career (Mlambo et al., 2021). CPD enables nurses to remain current with emerging best practices, technologies, and health system reforms, thereby ensuring they can respond effectively to the ever-changing needs of patient populations. This is especially critical in contexts where the burden of disease is shifting, and where technological innovations are rapidly transforming clinical workflows (Kurtović et al., 2023; Merry et al., 2023).

Competence in nursing is fundamentally linked to evidence-based practice (EBP). EBP bridges the gap between research and bedside care by promoting the use of scientifically validated interventions (Portela Dos Santos et al., 2022; Brunt & Morris, 2023). Nurses are increasingly required to not only understand clinical guidelines but also critically appraise research, apply it to specific patient situations, and evaluate outcomes (Abu-Baker et al., 2021). Thus, developing the skill to synthesize knowledge and apply it in patient care is a vital marker of professional competence. Sherwood (2024) emphasized that nurses who regularly engage in reflective practice and clinical reasoning are better positioned to deliver

personalized and effective care, reduce risks of error, and uphold ethical standards.

Another significant aspect of professional competence involves safety and quality standards. The nursing workforce plays a pivotal role in reducing preventable harm in clinical settings. International patient safety goals—such as safe medication administration, infection control, and effective communication—are directly influenced by nurses' clinical judgment, vigilance, and accountability (Phillips et al., 2021). In high-acuity environments such as intensive care units, emergency departments, and surgical settings, even minor lapses in competence can lead to severe consequences. Competent nurses are those who can manage high-pressure scenarios, coordinate with interdisciplinary teams, and make prompt decisions rooted in clinical evidence (Flaubert et al., 2021).

Mentorship and supportive learning environments are also critical in ensuring competence among novice nurses and those transitioning into advanced roles (Gularte-Rinaldo et al., 2023). Experienced nurses, educators, and clinical leaders serve as role models and provide structured guidance that fosters confidence, critical thinking, and practical wisdom (Richardson et al., 2023). Mentorship is especially important in settings with high turnover or where new graduates face complex case loads with limited support. A well-integrated mentorship model helps reduce transition shock, supports emotional resilience, and reinforces best practices among new practitioners (Gularte-Rinaldo et al., 2023).

However, the reality of healthcare delivery often includes systemic challenges that can undermine nurses' ability to demonstrate competence. These include staffing shortages, high patient-to-nurse ratios, limited access to training resources, and administrative burdens (Haddad & Geiger, 2023). Yang et al. (2024) added that in low- and middle-income countries, nurses may also experience gaps in professional preparation, resource scarcity, and inconsistent regulatory enforcement. These conditions underscore the need for institutional commitment to nurse training, supervision, and competency-based evaluation.

In response, many countries have implemented competency-based frameworks that define and assess expected nursing skills across various domains, including clinical care, ethical practice, communication, and leadership (Zumstein-Shaha & Grace, 2023). These frameworks allow for standardized assessment and benchmarking of nursing performance, while also guiding curriculum development and licensure examinations. They provide clarity to both

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employers and practitioners regarding what constitutes safe and effective practice (Banks & Savrin, 2025).

Importantly, competence is also shaped by the individual nurse's motivation, values, and professional identity. Nurses who view their work as a vocation tend to exhibit greater commitment to learning and improvement (Zou et al., 2024). Cultivating a culture of excellence within healthcare institutions—one that values knowledge sharing, innovation, and accountability—can therefore reinforce competence as a shared organizational goal (Lu et al., 2022).

Nursing Competency in the Global and Philippine Context

Globally, the demand for competent nurses has intensified due to the increasing complexity of healthcare systems, an aging population, the rise of chronic diseases, and the emergence of new infectious threats (e.g., COVID-19, antimicrobial resistance). As frontline healthcare providers, nurses must be capable of addressing dynamic patient needs while maintaining quality and safety in care delivery (Flaubert et al., 2021). The International Council of Nurses (ICN) defines nursing competency as the effective application of a combination of knowledge, skills, and judgment, demonstrating professional behavior and accountability in accordance with the standards of the profession (Mrayyan et al., 2023). Countries like the United States, Canada, the United Kingdom, and Australia have well-established frameworks for nursing competencies, which serve as the basis for educational curricula, licensure exams, and professional development programs (Bykowski et al., 2025). For example, the U.S. uses the National Council Licensure Examination (NCLEX), which is grounded in a competency-based model (Lewis et al., 2022). In the Philippine, its competency-based framework is the Professional Regulation Commission's Nurse Licensure Examination, which is guided by the core competencies and program outcomes outlined in the CHED Memorandum Order No. 14, Series of 2009, and reinforced through continuing professional development policies under the Republic Act No. 10912, also known as the Continuing Professional Development Act of 2016.

In these countries, nursing competency models emphasize patient-centered care, evidence-based practice, interprofessional collaboration, and lifelong learning. Benner's (1984) "From Novice to Expert" theory, a foundational model in nursing education globally, underscores that competency evolves through clinical experience and reflective

practice. Competency-based frameworks are not static; they adapt to societal health needs, technological advancements, and healthcare reforms.

The Association of Southeast Asian Nations (ASEAN, 2025) Mutual Recognition Arrangement on Nursing Services seeks to harmonize competency standards to promote nurse mobility and workforce development across the region. Countries such as Thailand, Malaysia, and Singapore have initiated reforms in nursing education to align with international best practices. However, in the Philippine, the nursing profession is regulated by the Philippine Nursing Act of 2002 (R.A. 9173), which mandates competency-based education and licensing. The Bachelor of Science in Nursing (BSN) curriculum is structured to develop core competencies in clinical care, communication, ethics, leadership, and health education. The Professional Regulation Commission, through the Board of Nursing, ensures that nursing graduates meet minimum competency standards via licensure examinations.

Despite these national standards, the Philippines faces ongoing challenges in ensuring uniform competency development. Resource limitations, inconsistent access to training, and regional disparities in healthcare infrastructure affect both the quality of nursing education and the professional growth of nurses (Corpuz, 2023). These challenges are magnified in geographically isolated and disadvantaged areas like Palawan, where nurses must perform a broad range of tasks with limited support and supervision.

To assess nursing competencies, various tools are utilized internationally, including structured evaluations, simulation-based assessments, peer reviews, and self-assessment instruments (Huang et al., 2023; Al-Hassan et al., 2025). One widely used tool is the Competency Inventory for Registered Nurses (CIRN), which evaluates nurses across seven core domains: Clinical Care, Leadership, Interpersonal Relationships, Legal and Ethical Practice, Professional Development, Teaching and Coaching, and Critical Thinking and Research Aptitude. These domains reflect both technical and non-technical dimensions of nursing performance (e.g., Al Jabri et al., 2021; Feliciano et al., 2021; Shibiru et al., 2023).

Clinical Care

Clinical care remains the foundational domain of nursing competency, embodying the direct application of theoretical knowledge to real-world patient care. It entails a comprehensive scope of responsibilities, including patient assessment,

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accurate diagnosis, planning and implementation of nursing interventions, health monitoring, and evaluation of outcomes. The goal is to deliver safe, effective, evidence-based, and compassionate care, regardless of the healthcare setting (Toney-Butler & Thayer, 2023).

The development of clinical competency is a central goal of nursing education and practice. Countries like the United States, Canada, Australia, Japan, and many members of the European Union have embedded robust mechanisms in their healthcare systems and educational institutions to ensure high standards in clinical care. These include structured clinical rotations, hands-on simulation labs, standardized patient interactions, and rigorous licensure examinations that evaluate clinical decision-making, technical skills, and patient safety awareness (Mryyan et al., 2023; Alkhelaiwi et al., 2024). In the United Kingdom, for example, the Nursing and Midwifery Council (NMC) mandates the completion of Objective Structured Clinical Examinations (OSCEs) to assess whether internationally educated nurses meet the required standards for clinical practice (Palmer et al., 2024).

Moreover, global nursing literature increasingly emphasizes the importance of patient-centered care, which encourages nurses to view patients not merely as clinical subjects but as whole persons with physical, emotional, psychological, and spiritual needs. Nurses are trained to integrate cultural competence, communication skills, and psychosocial support into clinical care delivery (Flaubert et al., 2021; Kwame & Petrucka, 2021). In multicultural societies like Canada, where patients come from diverse ethnic backgrounds, clinical care competency also involves sensitivity to cultural and linguistic differences, further highlighting the broad skill set nurses must master to be effective (Červený et al., 2022).

In the Philippine, clinical care is a critical pillar of the BSN curriculum. Nursing students are required to accumulate extensive clinical hours across multiple healthcare settings—including tertiary hospitals, primary health units, and community health programs. The Commission on Higher Education (CHED) sets standards for clinical instruction, and nursing schools partner with training hospitals to expose students to varied clinical conditions and cases. Nevertheless, a common issue is the uneven quality of clinical placements. Some hospitals, especially in urban centers, are saturated with student nurses, resulting in limited hands-on opportunities. In contrast, rural hospitals may lack the necessary equipment, supervision, or patient volume to provide

comprehensive training experiences (Madayag et al., 2024).

In geographically isolated areas, nurses often assume broad clinical responsibilities that exceed those of urban counterparts. A nurse assigned to a rural health unit may need to perform minor surgical procedures, manage childbirth, respond to emergencies, and run immunization programs—often without immediate support from physicians or specialists (Flaubert et al., 2021). This creates a paradox: while the exposure to multiple clinical areas can enhance practical knowledge, the lack of supervision and support may lead to increased stress, errors, and reduced confidence in clinical decision-making (Lepiani-Díaz et al., 2023).

Thus, self-rated clinical competency in areas such as Palawan is shaped not only by the knowledge and skills acquired in school but also by on-the-ground realities, which may involve operating with limited supplies, outdated equipment, or informal protocols. These factors call for a tailored approach in measuring and supporting clinical care competency—one that accounts for contextual variability and fosters adaptive capacity among nurses in underserved regions (El Machtani El Idrissi et al., 2021; Workneh et al., 2024).

Leadership

Leadership in nursing is more than just managing teams or holding administrative titles—it involves the ability to guide, inspire, and coordinate healthcare teams in delivering high-quality care (Alsadaan et al., 2023). This competency encompasses decision-making, conflict resolution, resource management, strategic thinking, advocacy, and influencing healthcare policies and institutional direction (Jiang, 2024).

Globally, nurse leadership is gaining prominence as healthcare systems become more complex and interdisciplinary. In the United States, leadership is considered a core competency across all levels of nursing, from bedside practice to executive administration (Everett & Farber, 2022). Nursing leaders play pivotal roles in shaping organizational culture, enforcing patient safety standards, and implementing quality improvement initiatives (Haskins & Roets, 2022). Leadership is not confined to formal positions. The concept of "clinical leadership" emphasizes that all nurses, regardless of rank, must take initiative, model ethical behavior, and advocate for patient needs (Flaubert et al., 2021). This is particularly crucial during health crises—such as the COVID-19 pandemic—where nurses led public health efforts, coordinated care teams, and even managed logistical challenges in understaffed units.

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In countries with well-funded healthcare systems, nurses often have access to professional development programs that include leadership training, coaching, and exposure to system-level planning (Browne & Chun Tie, 2024). However, in many low- and middle-income countries, leadership development is sporadic or underfunded. The absence of structured career pathways or role models can inhibit the cultivation of leadership competencies (Hooley et al., 2024).

Nursing leadership in the Philippines is embedded in both clinical and community practice. The Philippine Nursing Act encourages nurses to participate in planning, organizing, and implementing health services. Leadership is often assumed informally, especially in public health settings, where nurses may manage barangay health stations, conduct surveillance, and oversee disease prevention campaigns (Reyes et al., 2023). Despite this responsibility, formal leadership training is not always integrated into the nursing curriculum. Continuing professional development in leadership is limited by financial constraints, lack of mentorship programs, and institutional hierarchies that may restrict decision-making authority to physicians or non-nursing managers.

Interpersonal Relationships

Interpersonal competency is the bedrock of therapeutic communication and teamwork. It includes a nurse's ability to build rapport with patients, collaborate with colleagues, engage with families, and demonstrate empathy, cultural sensitivity, and respect in every professional interaction (Sharma & Gupta, 2023). Strong interpersonal skills facilitate trust, improve compliance with care plans, reduce errors, and enhance patient satisfaction.

Globally, healthcare institutions prioritize interpersonal communication as a critical safety and quality issue. The WHO (2023) identifies communication breakdowns as one of the leading causes of adverse events in hospitals. As a result, many countries incorporate soft skills training into nursing education. For example, in Australia, the National Safety and Quality Health Service Standards emphasize communication skills as vital to clinical governance and continuity of care (Xiong et al., 2025). In the United States, interprofessional education is widely implemented to prepare nurses for team-based care and collaborative decision-making with physicians, pharmacists, therapists, and other health professionals (Kobrai-Abkenar et al., 2024).

Countries with multicultural populations, such as Canada and New Zealand, place additional emphasis on cultural competence as an extension of

interpersonal competency. Nurses are trained to respect cultural differences, avoid biases, and tailor their communication strategies to meet the linguistic and cultural needs of diverse patient populations (Urbanavičė et al., 2025). This is particularly important in indigenous and immigrant communities, where misunderstandings and mistrust can undermine care (Theodosopoulos et al., 2024).

The value of interpersonal warmth, hospitality, and empathy in the Philippines is deeply embedded in nursing culture. Filipino nurses are often praised internationally for their compassionate and respectful approach, making them highly sought after in global healthcare markets (Philippine Daily Inquirer, 2023). Nonetheless, challenges remain. Heavy workloads, understaffing, and administrative burdens can erode a nurse's capacity to sustain meaningful patient interactions. Additionally, there is limited integration of formal communication theory and intercultural training in many nursing programs. Anzini et al. (2025) argued that nurses frequently interact with Indigenous Peoples, migrant workers, and local populations with varying health beliefs and expectations. Establishing trust in such contexts demands not only language proficiency and active listening but also cultural humility and adaptability. A nurse's ability to build interpersonal relationships under such constraints can determine the effectiveness of health interventions, especially in programs requiring long-term behavioral change such as maternal care, family planning, or tuberculosis treatment adherence (Abubakari et al., 2024).

Legal and Ethical Practice

Legal and ethical practice is foundational to the integrity and accountability of the nursing profession (Haddad et al., 2023). This competency domain encompasses a wide range of obligations including adherence to laws and regulations, observance of ethical principles such as beneficence and non-maleficence, maintenance of patient confidentiality, respect for informed consent, and observance of professional boundaries (Oleharczyk & Young, 2024). In most countries, this domain is rigorously defined by national nursing regulatory bodies and embedded into professional codes of conduct and ethics (Boehning & Haddad, 2023).

In countries like the United States, nurses are licensed under strict state boards of nursing, which establish and enforce legal responsibilities. Violations can result in disciplinary actions including revocation of licenses, litigation, or criminal charges. Ethical practice is enforced

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through institutional ethics committees, continuing ethics education, and mandatory reporting systems (Boehning & Haddad, 2023). Similarly, in the United Kingdom, the Nursing and Midwifery Council provides a legally binding Code that nurses must follow throughout their professional life. Nurses are required to act with integrity and prioritize patient safety, even when working in complex or high-pressure environments (Smart & Creighton, 2022).

In contrast, countries in the Global South often face more complex implementation challenges. While national codes and laws may be in place, enforcement mechanisms can be inconsistent, particularly in decentralized health systems. In Indonesia, for example, regional disparities in healthcare governance impact how legal and ethical guidelines are applied on the ground (Lakson et al., 2023). This is similar to the Philippine setting, where ethical and legal knowledge is included in nursing curricula and licensure exams, yet the actual application of these principles can be compromised due to systemic limitations (CHED Memorandum Order of 2009). The absence of immediate legal counsel or formal complaint mechanisms makes it difficult to seek guidance or redress in case of ethical uncertainties. Cultural factors may also complicate the ethical landscape; for instance, local customs or expectations might conflict with principles like patient autonomy or gender-sensitive care (Bobel et al., 2022). In such contexts, nurses rely heavily on personal judgment and peer guidance to navigate ethical conflicts, highlighting the importance of ongoing ethics education and support (Andersson et al., 2022).

Professional Development

Professional development is a lifelong commitment that ensures nurses remain competent, responsive, and innovative throughout their careers. Globally, it is widely recognized as an essential component of nursing professionalism and is linked to improved patient outcomes, job satisfaction, and workforce retention (Mlambo et al., 2021; Kurtović et al., 2024).

In countries like Australia and Canada, professional development is both a regulatory requirement and a personal responsibility. Nurses must demonstrate completion of a set number of continuing professional development (CPD) hours annually to maintain licensure (Main et al., 2023). These CPD activities range from workshops, conferences, certifications, to advanced degrees, and are often recorded in personal learning portfolios subject to audit. In Asian countries, structured frameworks for professional growth are

supported by government and hospital funding, allowing nurses to pursue postgraduate education and specialized training in fields such as intensive care, geriatrics, and oncology (Glarcher & Vaismoradi, 2024).

In low- and middle-income countries, however, CPD access is uneven due to systemic and logistical constraints. In Sub-Saharan Africa, for instance, although governments and NGOs promote capacity-building initiatives, nurses often face barriers such as lack of internet access, understaffing (making time-off for training difficult), and financial hardship (Kolié et al., 2023). Similarly, in the Philippines, although the PRC mandates CPD units for license renewal, compliance can be difficult for nurses in remote areas due to the limited availability of accredited training programs (Crispino & Rocha, 2021). In Palawan, professional development is especially challenged by the lack of proximity to educational centers, limited internet infrastructure for online learning, and budget constraints that hinder travel to training venues. Furthermore, local healthcare institutions may not always prioritize or allocate resources for staff development. Nurses may also carry heavy workloads that leave little time for formal education or self-directed learning. These systemic gaps not only hinder personal career advancement but also affect the overall quality of care delivered in the region. Addressing these challenges requires creative solutions. Mobile CPD units, partnerships with universities offering remote learning, and integration of CPD into workplace routines could significantly enhance access. Furthermore, developing local training-of-trainers models could enable experienced nurses in Palawan to serve as CPD facilitators for their peers, thereby promoting a sustainable and context-sensitive approach to professional growth.

Teaching and Coaching

Teaching and coaching competencies are essential not only in academic institutions but also in clinical and community settings (Susaeta, 2024). Nurses are expected to educate patients on disease management, lifestyle modifications, and medication adherence; guide junior staff in clinical competencies; and collaborate with community leaders on public health initiatives (Berardinelli et al., 2024).

Globally, teaching competency is increasingly professionalized. In Finland and Norway, for example, nurses involved in clinical instruction must complete pedagogical training and obtain teaching certification. Nursing education emphasizes adult learning theories, instructional design, and evaluation methods. Clinical nurse

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educators are key personnel in most tertiary hospitals, mentoring new graduates and developing clinical guidelines (Sulosaari et al., 2023). In community health nursing, particularly in settings focused on primary healthcare, patient education becomes a daily task. Nurses are tasked with running community education programs on diabetes prevention, sexual and reproductive health, and mental wellness. Their role extends beyond care delivery to proactive engagement with the population (Ramalepa, 2023; Ravaghi et al., 2023; Terry et al., 2024).

In the Philippines, while teaching is embedded in the nurse's role, formal training in pedagogy is not always provided outside of academia. Most clinical nurses assume teaching roles informally, mentoring students or orienting new staff through experience-based guidance. In rural provinces like Palawan, nurses frequently lead health education campaigns, conduct community lectures, and train barangay health workers. However, the effectiveness of these teaching efforts depends heavily on the nurse's communication skills, understanding of educational methodologies, and access to teaching materials. To enhance this domain, integrating formal teaching modules into both undergraduate and CPD curricula is necessary. Leveraging technologies such as mobile education apps, community radio programs, or audiovisual materials can also improve the reach and impact of health education in remote settings.

Critical Thinking and Research Aptitude

Critical thinking and research aptitude represent the intellectual backbone of modern nursing. This domain reflects the nurse's ability to analyze clinical situations, evaluate evidence, and make informed decisions (Zainal et al., 2025). In research, it refers to the ability to design studies, interpret findings, and apply them to practice, thereby contributing to the advancement of nursing knowledge and practice (Ilasalan et al., 2023). Globally, this competency is emphasized through evidence-based practice (EBP), which has become the gold standard in healthcare. Countries such as the Netherlands and Sweden incorporate EBP training from the undergraduate level through postgraduate specialization (Wheeler et al., 2022; Lindström & Falk, 2023). In the U.S., Magnet hospitals foster a culture of clinical inquiry by supporting nurses in conducting practice-based research, presenting at conferences, and publishing in peer-reviewed journals (Drury et al., 2024).

In the Philippine, while research is introduced during undergraduate studies, its practice often ends upon graduation. Few clinical institutions prioritize nursing-led research, and the

absence of research mentorship, protected time, and financial support discourages further engagement (Gularte-Rinaldo et al., 2024). In Palawan, these barriers are compounded by a lack of academic partnerships, limited internet access, and minimal exposure to scholarly activities. Nonetheless, research aptitude remains crucial. Nurses with strong critical thinking skills can better respond to complex cases, advocate for patient-centered policies, and contribute to community-based solutions for public health problems (Kwame et al., 2021). Establishing research collaboratives, offering microgrants, and training research mentors could help nurture a research-oriented culture even in resource-limited environments (Mremi et al., 2023).

Factors Influencing the Competency of Nurses

The competency of nurses is a critical determinant of health service quality, patient safety, and professional accountability. While technical skill and clinical knowledge are key, recent scholarship emphasizes that self-rated competency is influenced by a complex array of individual, organizational, and sociocultural factors, as well as systemic and contextual realities. Understanding these multidimensional influences is essential for tailoring interventions that enhance nursing performance, particularly in public health and primary care settings where nurses serve on the frontlines of comprehensive health programs.

Individual-Level Factors

The competency of nurses is shaped significantly by individual-level factors, recent literature highlights that experience, education, and psychological traits directly influence their self-rated capacity and performance (Anyago et al., 2024). Studies from 2021 to 2025 demonstrate that nurses with more years of clinical experience report higher competence, particularly in complex care scenarios. For instance, Atalla et al. (2025) found a positive correlation between experience and confidence in clinical decision-making, while Bardhia et al. (2025) noted that aged and experienced nurses are more adept in community and primary healthcare contexts. Advanced training also matters: nurses with graduate education or specialty certifications consistently rate themselves more highly in both clinical and managerial competence (Canga-Armayor, 2024).

Psychological elements such as self-efficacy and motivation are critical. Self-efficacy—the belief in one's ability to carry out specific tasks—is positively associated with both perceived competence and job satisfaction. Shorey and Lopez (2021) reported that nurses with higher self-

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efficacy not only perform better but also exhibit greater resilience under pressure. Supporting this, Bennett et al. (2023) determined that a supportive work environment alongside personal efficacy significantly predicted quality-improvement competency, suggesting a multifaceted relationship between internal belief systems and perceived proficiency.

Professional development remains another cornerstone. Engagement in continuing professional development—through formal workshops, online courses, and specialty training—has been linked to improvements in technical, leadership, and pedagogical competencies. A 2024 cross-sectional study in Palestine found that nurses attending three to five workshops or more were significantly more competent in clinical care, patient education, documentation, and leadership than those attending fewer sessions (Zaitoun, 2024). In China, a 2022 mixed-methods study on military nurses confirmed that competency-based CPD curricula enhanced satisfaction, motivation, and professional growth (Ma et al., 2022). Regionally, Filipino nurses also acknowledge benefits from CPD, such as enhanced career mobility, expanded networks, and improved capabilities, regardless of demographic factors (Faba-An et al., 2024).

Organizational/Institutional Factors

The organizational and institutional environment has a profound impact on nurses' perceived and actual competency. Access to ongoing training and mentorship is foundational: a 2023 quasi-experimental study in Egypt demonstrated that structured mentorship programs significantly enhanced mentors' ability to provide clinical guidance and feedback—skills directly linked to improved mentee competence (Hagrass et al. 2023). In the U.S., the Mentorship ReSPeCT program revealed that personalized mentorship markedly improved problem-solving, professional communication, and confidence among newly graduated nurses over two years, contributing to their retention (Gularte-Rinaldo et al., 2023). These findings highlight mentorship's dual role in building both competence and intent to stay—key goals for robust organizational frameworks.

Leadership quality and workplace culture further shape nursing competence. A 2023 study involving South Korean nurses found that transformational leadership and fair organizational practices boosted engagement and psychological safety, while a global review of nursing leadership literature linked relational leadership—especially transformational styles—to better staff satisfaction and improved patient outcomes, mediated by

empowerment and trust (Ystaas et al., 2023). These insights suggest that when leaders foster collaboration, recognize contributions, and model strong values, nurses feel more competent in their roles and are better supported to deliver high-quality care.

Infrastructure and staffing levels are also critical. A multicenter study published in 2024 revealed that mandatory overtime and insufficient staffing significantly reduced nurse job satisfaction and increased turnover risk, though burnout alone was driven more by workload than staffing ratios (Bae, 2024). Consistent evidence from U.S. and international data—including an AHRQ review—confirms that optimal nurse-to-patient ratios are associated with lower mortality, fewer medical errors, reduced infections, and less burnout (Phillips et al., 2021). For example, pediatric nurse practitioners with caseloads exceeding 5:1 experienced significantly higher burnout compared to those in better-staffed environments, with leadership support proving protective. This link demonstrates how institutional capacity directly affects nurses' ability to apply their skills confidently and sustainably.

Recognition and constructive performance evaluation contribute significantly to nurses' competence. Research in South Korea emphasized that organizational justice—shown through equitable policies and transparent feedback—was a strong predictor of work engagement, which in turn correlates with competence (Moon et al., 2024). Additionally, a strengths-based leadership program conducted in Canada and other settings significantly boosted participants' leadership efficacy and work satisfaction, while reducing stress (Kopperud & Kost, 2025). Such results highlight the psychological impact of supportive institutional environments on nurses' self-efficacy and professional performance.

Sociocultural and Systemic Factors

Nursing competence is strongly shaped by broader sociocultural and systemic contexts across healthcare systems. Community expectations and cultural norms play a significant role in influencing how nurses perceive their own capabilities. A 2021 Tanzanian study highlighted how collective cultural values inform nursing behaviors, communication, and perceived legitimacy in clinical decision-making (Candan Dönmez et al., 2025). When communities traditionally view nurses as experts and trust them, this enhances professional self-esteem. Conversely, in settings where nurses—especially male or those from minority groups—face skepticism or dismissal, this

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negatively affects morale and perceived competence (Alkahed et al., 2022). These dynamics often reflect in team interactions and patient care.

Sociocultural constructs such as gender dynamics and hierarchical norms remain powerful determinants of competence. A 2023 study reviewing gender biases found that women nurses consistently encountered stereotyping and reduced opportunities for advancement, while men benefited from the so-called 'glass escalator'—experiencing faster career progression despite their minority status in the profession (Gauci et al., 2023). These disparities stem from deeply embedded gender-role expectations, which also impact how different genders are perceived in terms of competence. In Tanzania, some patients and colleagues harbored implicit biases that male nurses lacked empathy, and female nurses were less adept at handling emergencies (Masibo et al., 2025). Such biases erode equitable expectations of competence and can undermine workplace collaboration.

Workplace culture, including leadership and organizational support, also plays a pivotal role. A 2024 systematic review emphasized that strong relational and communicative skills among nurse leaders significantly improve staff morale, reduce burnout, and reinforce competence through trust and mentorship (Alsadaan et al., 2023). Where leadership is supportive and participative, nurses feel more empowered and confident in their roles. In contrast, hierarchical or disrespectful environments produce stress and disengagement, which diminish self-assessed competence.

Furthermore, public sector health delivery often places nursing staff at the crossroads of community governance and inter-agency coordination. In contexts like municipal health units in the Philippines, nurses are required to juggle clinical responsibilities with administrative duties, stakeholder coordination, and decentralized program management. Studies show that inadequate integration across sectors—such as LGU, NGOs, and community volunteers—exacerbates workload and diminishes confidence in fulfilling professional roles (Palompon et al., 2024). Positive multi-level support, however, enhances professional identity and competence.

RESEARCH GAP

Competency Gaps, Safety Implications, and the Need for Localized Understanding and Building on the need for competence, Swihart et al. (2023) also emphasized that positive behavioral adaptations rooted in previous learning are central to competent care. Rahmah et al. (2021) added that competence extends beyond theoretical knowledge

to include the precise execution of professional actions, thereby showcasing a high degree of professionalism. This connection between competence and patient safety is evident in studies that show how nurses' adherence to clinical protocols—such as proper stethoscope hygiene—can prevent hospital-acquired infections (Talaga-Ćwiertnia et al., 2023).

Conversely, negligence among nurses poses serious risks to patient safety. The Nurses Service Organization reported that 88.5% of malpractice cases between 2010 and 2014 were linked to stress, fatigue, and disorganization in the healthcare environment (WHO, 2023). Wheeler et al. (2018) further identified systemic inefficiencies and inconsistencies as contributing factors. Notably, Ao and Matthews (2024) documented that malpractice cases were associated with diagnostic errors and with improper treatment—both preventable with enhanced clinical competence.

Nurses today face both external and internal pressures. These include the need for continuous education in light of rapidly evolving medical technologies, coping with inadequate hospital resources, and adjusting to adverse workplace conditions (Xu et al., 2021). Despite these challenges, competence must remain a priority to ensure healthcare delivery aligns with quality and safety standards. Young and Smith (2025) argued that while competency may not always be visibly acknowledged, it can be evidenced through the successful fulfillment of duties and measurable outcomes.

Assessing nursing competency remains a complex process, often requiring multiple evaluation strategies (Mryyan et al., 2023). Yet, there is a noticeable lack of literature that focuses on measuring nursing competencies, particularly in specific country contexts like the Philippines (Rodríguez-Pérez et al., 2022). This gap inspired the current research initiative, which aims to better understand nursing competence in the Philippine healthcare system. The researchers recognized that nurses' competency profiles directly impact patient outcomes and healthcare service delivery. The limited availability of localized studies further motivated the researchers to explore the relationship between nurses' demographic profiles and their competency levels within the Philippine context.

STATEMENT OF THE PROBLEM

This study aims to assess the self-rated competency levels of nurses in Palawan and to identify the demographic and contextual factors that influence these competencies across various healthcare sectors (e.g., public hospitals, private

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hospitals, academe). The study also seeks to determine potential areas for intervention to strengthen nursing practice in the province. Specifically, it seeks to answer the following questions:

1. What is the demographic profile of Palaweno nurses in terms of the following variables?
 - 1.1. Employment Role
 - 1.2. Age
 - 1.3. Gender
 - 1.4. Civil Status
 - 1.5. Ethnicity
 - 1.6. Religion
 - 1.7. Highest Educational Attainment
 - 1.8. Monthly Income
 - 1.9. Sectoral Affiliation
 - 1.10. Year of BSN Graduation
 - 1.11. Time Interval Between Graduation and First Employment
 - 1.12. Employment Status
 - 1.13. Total Years of Professional Nursing Experience
 - 1.14. Years of Experience in Public Health Nursing
2. What is the self-rated competency level of Palaweno nurses in the following core domains?
 - 2.1. Clinical Care
 - 2.2. Leadership
 - 2.3. Interpersonal Relationships
 - 2.4. Legal and Ethical Practice
 - 2.5. Professional Development
 - 2.6. Teaching and Coaching
 - 2.7. Critical Thinking and Research Aptitude
3. What are the perceived factors that influence the self-rated competency of nurses in terms of:
 - 3.2. Individual-Level Factors
 - 3.3. Organizational/Institutional Factors
 - 3.4. Sociocultural and Systemic Factors
4. Is there a significant relationship in the self-rated competency of nurses, categorized into the following domains?
 - 4.1. Individual-Level Factors
 - 4.2. Organizational/Institutional Factors
 - 4.3. Sociocultural and Systemic Factors
5. Is there a significant predictive effect in the self-rated competency of nurses, categorized into the following domains?
 - 5.1. Individual-Level Factors
 - 5.2. Organizational/Institutional Factors
 - 5.3. Sociocultural and Systemic Factors
6. Is there a significant mediation in the self-rated competency of nurses, categorized into the following domains?
 - 6.1. Individual-Level Factors
 - 6.2. Organizational/Institutional Factors
 - 6.3. Sociocultural and Systemic Factors

7. What interventions or strategies can be proposed to enhance the competency of nurses in Palawan based on the findings of the study?

HYPOTHESIS

The following null hypotheses (Ho) will be tested at 0.05 level of significance.

1. There is no significant relationship in the self-rated competency of nurses, categorized into the following domains.
 - Individual-Level Factors
 - Organizational/Institutional Factors
 - Sociocultural and Systemic Factors
2. There is no significant predictive effect in the self-rated competency of nurses, categorized into the following domains.
 - Individual-Level Factors
 - Organizational/Institutional Factors
 - Sociocultural and Systemic Factors
3. There is no significant mediation in the self-rated competency of nurses, categorized into the following domains.
 - Individual-Level Factors
 - Organizational/Institutional Factors
 - Sociocultural and Systemic Factors

THEORETICAL FRAMEWORK

This study draws upon a multidimensional theoretical foundation that integrates perspectives from nursing theory, educational psychology, and learning theory in psychology to comprehensively examine the self-rated competencies of nurses.

1. Nursing Theory: Jean Watson's Unitary Caring Science Model (UCSM)

Framework Explanation: Jean Watson's Unitary Caring Science Model is a grand nursing theory that elevates the discipline of nursing beyond technical skills by emphasizing the relational, ethical, and existential dimensions of care. Grounded in humanistic and transpersonal philosophy, Watson's theory asserts that health and healing are not solely products of biomedical intervention but are deeply influenced by meaningful human connections. Central to her framework are the Caritas Processes—ten core principles that guide nurses toward reflective, compassionate, and ethically grounded practice. These principles emphasize authenticity, presence, respect for human dignity, spiritual well-being, and holistic healing, positioning caring as the moral and philosophical foundation of nursing.

Application to the Study: Watson's framework is instrumental in contextualizing nursing competence as a multidimensional construct that transcends mere clinical or procedural proficiency. Within the scope of this study, which seeks to evaluate the self-rated

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competencies of nurses in Palawan, UCSM serves as a philosophical underpinning for understanding how competencies are experienced, internalized, and expressed. Particularly, domains such as interpersonal relationships, ethical and legal practice, and professional development—included in the competency structure of this research—are aligned with Watson's emphasis on caring as both a value system and a practice. Her model affirms that competence in nursing must also encompass moral maturity, cultural sensitivity, emotional intelligence, and relational accountability, all of which are pertinent in the complex, community-based practice environments of Palawan.

Connection to the Research Problem:

The research problem centers on identifying how nurses in diverse healthcare sectors in Palawan perceive their competencies, and which individual, organizational, and systemic factors influence those perceptions. Watson's UCSM provides a relevant interpretive lens for analyzing these factors by framing the nurse's experience within a relational and humanistic context. For instance, variables such as leadership support, community expectations, stigma, and systemic inequities—often treated as external or environmental conditions—are reinterpreted by Watson as intrinsically tied to the nurse's ability to care, connect, and perform effectively. The model situates competence within a caring paradigm, underscoring the relational, affective, and identity-affirming dimensions of nursing that shape how competence is constructed and assessed by nurses themselves.

Integration and Support of the Study:

Integrating Watson's UCSM into this study not only deepens the philosophical foundation of nursing competency but also validates the inclusion of socio-relational factors in competency assessment tools. In the context of Palawan—where nurses often practice in resource-constrained, culturally diverse, and community-centered settings—Watson's emphasis on "Caring Moments" aligns with the real-world conditions under which nurses derive meaning, confidence, and professional identity. Moreover, this theoretical framework supports the inclusion of both quantitative (e.g., competency ratings) and qualitative (e.g., perceived influences and contextual barriers) data, enabling a holistic interpretation of the findings. UCSM ultimately reinforces the view that nursing competence is shaped not just by institutional standards or technical training, but by a dynamic interplay of self, others, and the broader sociocultural and

systemic environment in which nursing is practiced.

2. Nursing Theory with Educational Psychology Influence: Patricia Benner's Novice to Expert Theory

Framework Explanation: Patricia Benner's Novice to Expert Theory, based on the Dreyfus model of skill acquisition, offers a developmental lens through which clinical competence in nursing can be understood. The theory outlines five sequential levels of proficiency: novice, advanced beginner, competent, proficient, and expert. These stages reflect a nurse's evolving ability to apply clinical knowledge, exercise judgment, and respond effectively to patient needs within real-world contexts. Benner asserts that nursing expertise is cultivated not only through formal education but more critically through experiential learning, pattern recognition, and situational engagement. As nurses progress, they shift from rule-based actions to intuitive and holistic decision-making grounded in experience. This model repositions competency as a dynamic process shaped by exposure, mentorship, and reflective practice over time.

Benner's Novice to Expert Model is classified as a nursing theory that is conceptually grounded in the Dreyfus Model of Skill Acquisition, reflecting strong influences from educational psychology. It bridges clinical practice with experiential learning principles, making it highly applicable in both nursing education and professional development contexts.

Application to the Study: The Novice to Expert framework is directly relevant to this study as it provides a structured theoretical basis for analyzing the role of experience in shaping nurses' self-assessed competencies. The inclusion of demographic variables such as years of professional experience, employment role, time since graduation, and sectoral affiliation aligns with Benner's assertion that competence develops through cumulative real-world engagement. This theory justifies the study's exploration of how nurses' perceived competencies vary depending on their stage of professional development and exposure to increasingly complex clinical situations. It provides the rationale for examining different groups of nurses across public, private, and academic sectors in Palawan to better understand their progression along the competency continuum.

Connection to the Research Problem:

The central research objective—to examine how demographic and contextual factors influence the self-rated competencies of nurses—is explicitly

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addressed by Benner's framework. By conceptualizing competency as a result of experiential growth and context-specific learning, the theory offers a meaningful way to interpret variations in competency scores across age groups, job roles, or employment settings. It also supports the investigation of whether systemic issues, such as delayed employment after graduation or limited exposure to complex clinical tasks, hinder the developmental trajectory of nurses in certain sectors. Thus, Benner's theory provides a foundational perspective from which the research questions can be answered, particularly those exploring predictors and differences in competency levels.

Integration and Support of the Study:

The integration of Benner's theory into the study allows for a more nuanced interpretation of the data, moving beyond static assessments of skill toward an appreciation of how competency unfolds through experience. It supports the study's mixed-methods approach by contextualizing quantitative results within a developmental framework and justifies the need for sector-specific recommendations. For instance, if younger or less experienced nurses report lower competency in leadership or research, this could be interpreted as a natural point in their developmental arc, informing targeted interventions like mentorship or structured career ladders. By grounding the study in a well-established developmental model, the theory enhances the credibility of the analysis and the relevance of the proposed strategies for strengthening nursing practice in Palawan.

Patricia Benner's Novice to Expert Theory is essential to this thesis as it provides a developmental foundation for understanding how nurses acquire and assess their competencies over time. It emphasizes the value of experience, reflection, and context in shaping professional capability, and thereby aligns closely with the study's goals. Incorporating this framework enables the research to more accurately capture the diversity of nursing experiences and inform evidence-based interventions that support nurses at various stages of their careers. In the context of human resource planning and professional development in Palawan, the theory serves as a critical tool for aligning capacity-building initiatives with actual competency needs.

3. Psychology in Learning Theory: Bandura's Social Cognitive Theory

Framework Explanation: Albert Bandura's Social Cognitive Theory offers a psychological model that explains how individuals acquire and maintain behaviors while also taking

into account the dynamic interactions between personal, environmental, and behavioral factors. Central to this theory is the concept of self-efficacy, which refers to an individual's belief in their capability to execute tasks and achieve goals. According to Bandura, self-efficacy is shaped by four primary sources: mastery experiences, vicarious learning through observation of others, social or verbal persuasion, and emotional and physiological states. These elements collectively influence how individuals approach goals, persist in the face of obstacles, and evaluate their personal competencies. In professional domains such as nursing, self-efficacy not only governs behavior but also directly influences motivation, decision-making, and performance under pressure.

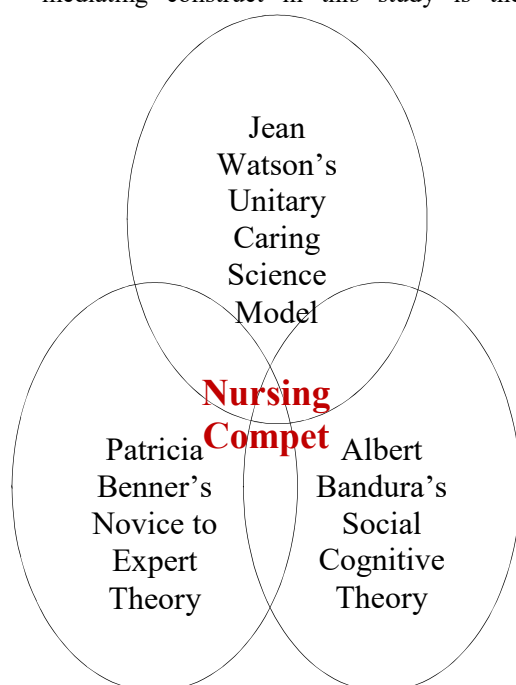
Application to the Study: This study focuses on nurses' self-rated competencies across multiple professional domains, including clinical care, leadership, interpersonal relations, research, and professional development. These self-assessments are inherently linked to the construct of self-efficacy, as they reflect the nurse's internal judgment about their ability to perform nursing tasks effectively. Bandura's theory is particularly applicable in understanding how individual-level experiences (e.g., years of practice, training, education), organizational support (e.g., supervision, mentorship), and psychological conditions (e.g., confidence, stress) contribute to these self-ratings. For example, a nurse who has repeatedly succeeded in high-pressure clinical situations is more likely to develop a strong sense of efficacy, which in turn results in higher competency ratings.

Connection to the Research Problem: A core objective of this research is to identify which factors significantly influence the self-perceived competency levels of nurses. Bandura's Social Cognitive Theory provides a relevant interpretive framework to examine how both individual and environmental factors interact to shape these perceptions. Since self-rated competency is both a cognitive and behavioral outcome, understanding the antecedents of self-efficacy allows the study to probe deeper into why nurses in similar institutional or demographic categories may rate themselves differently. It also helps to explore how structural constraints, such as limited feedback mechanisms or lack of support systems, can undermine self-efficacy and, by extension, self-perceived professional competence.

Integration and Support of the Study: This theoretical perspective adds depth to the interpretation of the study findings by framing competency not merely as a function of experience

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or training, but as a dynamic belief system influenced by continuous interaction with one's professional environment. It reinforces the significance of motivation, emotional well-being, and contextual support systems as key components in building professional confidence. As such, Bandura's theory supports the inclusion of psychological and social variables under the individual, organizational, and sociocultural domains being studied. It strengthens the argument that enhancing nurse competency requires not only technical training but also strategies aimed at reinforcing self-belief, resilience, and a supportive work climate. Understanding self-efficacy as a mediating construct in this study is therefore



critical for designing interventions that aim to elevate nurses' actual and perceived performance across healthcare sectors in Palawan.

Figure 1. The interconnectedness of three theoretical frameworks (Jean Watson's Unitary Caring Science Model, Patricia Benner's Novice to Expert Theory, and Albert Bandura's Social Cognitive Theory) for this study in assessing the competency of nurses in Palawan.

The figure presents a unified conceptual framework positioning nursing competency at the intersection of three foundational theories: Jean Watson's Unitary Caring Science Model, Patricia Benner's Novice to Expert Theory, and Albert

Bandura's Social Cognitive Theory. Each framework contributes a critical dimension—Watson emphasizes the moral-ethical and relational essence of nursing, Benner situates competency as a developmental process grounded in experiential learning, and Bandura highlights the psychological mechanisms, particularly self-efficacy, that influence performance. The overlapping areas among these theories reflect the interconnected nature of nursing practice. For example, where Watson and Benner intersect lies the recognition that compassionate, ethical care evolves through reflective practice and accumulated experience. The overlap between Benner and Bandura underscores the role of experience in shaping both skill mastery and confidence, while the convergence of Watson and Bandura represents the influence of caring environments and human connection on psychological empowerment. At the center, where all three domains converge, is a holistic understanding of nursing competency—not as a fixed trait, but as a dynamic integration of caring presence, clinical judgment, personal growth, and contextual adaptability within the complexities of real-world practice. This model affirms that true professional competency in nursing is cultivated through a synergy of values, experience, and self-belief.

OPERATIONAL FRAMEWORK

This study will adopt the ADDIE model—Analysis, Design, Development, Implementation, and Evaluation—as its operational framework to guide the systematic execution of each research phase. The ADDIE model will serve as a functional structure to ensure that the formulation of research instruments, data collection procedures, and analytical processes are aligned with the study's objectives and statements of the problem (SOP 1 to SOP 7).

Analysis Phase

In the Analysis phase, an integrative review of related literature will be conducted to explore the state of nursing competencies within the context of Palawan. This will inform the identification of key gaps in the literature and the establishment of conceptual variables and domains to be measured. Initial survey items covering demographic data, core competencies, and perceived influencing factors will be drafted. This phase will also establish theoretical grounding for the study, drawing from Benner's model of clinical competence, Watson's theory of human caring, and Bandura's social cognitive theory to guide variable definition and item development.

Design Phase

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In the Design phase, the survey instrument will be structured using Likert-type scales, logically grouped according to the domains identified in the analysis phase. The sampling method, specifically stratified random sampling, will be outlined to ensure representation across sectors, geographic areas, and clinical settings. The finalized data collection procedure will include both digital and printed tools depending on accessibility, and informed consent materials will be prepared to ensure ethical compliance.

Development Phase

The Development phase will involve the validation of the survey instrument through an expert panel. The content validity index will be calculated, and revisions will be made accordingly. The tool will then be pilot-tested among a small group of nurses outside the main sample to assess reliability, using Cronbach's alpha to measure internal consistency and item performance.

Implementation Phase

Following development, the Implementation phase will involve administering the validated instrument to the target sample across different healthcare sectors in Palawan. Participation will be monitored to ensure adequate response rates and the completeness of returned questionnaires. This will result in a comprehensive dataset covering demographics, self-assessed competencies, and perceived systemic influences.

Evaluation Phase

Lastly, in the Evaluation phase, the dataset will be subjected to statistical analysis in accordance with the study's statements of the problem. Descriptive statistics will be used to summarize profiles and competency levels (SOP 1 and 2), while inferential analyses such as ANOVA and t-tests will be conducted to examine group differences (SOP 4 and 5). Regression analyses will be employed to explore predictive relationships between variables (SOP 6). Findings will be synthesized to propose evidence-based strategies for enhancing nursing education and practice (SOP 7). Through this operational framework, the study will ensure coherence between its conceptual foundation, methodological rigor, and anticipated impact on nursing policy and training programs.

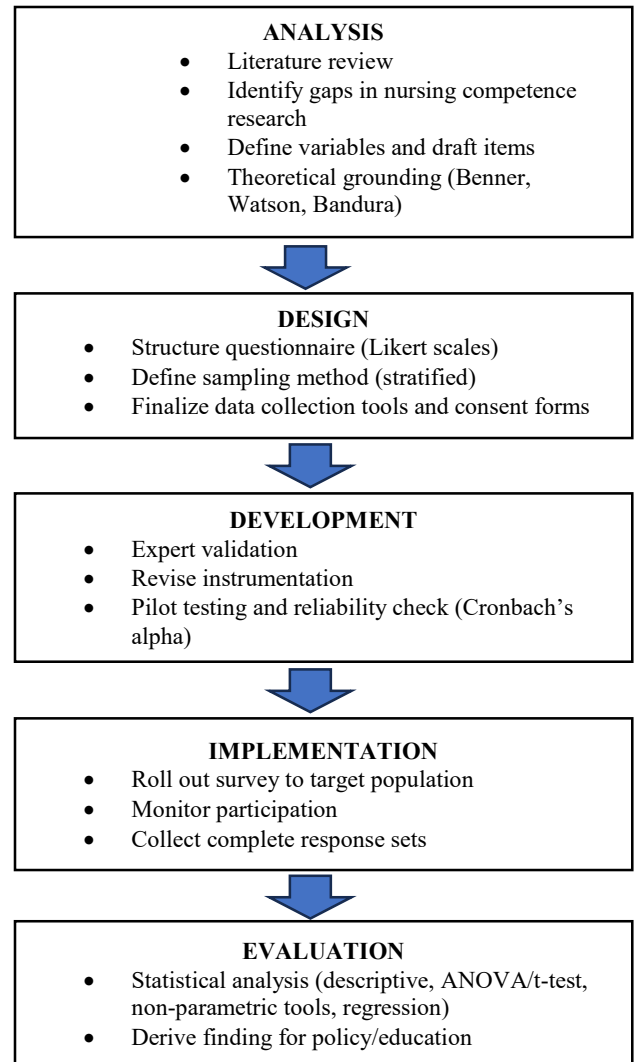


Figure 2. ADDIE-based operational framework to assess the competency profile of Palaweno nurses.

CONCEPTUAL PARADIGM

The conceptual paradigm illustrates the interrelatedness of the study's core constructs: nurse competency, influencing factors, and contextual demographics, framed through the lens of a competency-based assessment approach. At the center of this paradigm lies the competency of Palaweño nurses, which is shaped and informed by the dynamic interaction of three domains—individual-level factors (such as experience, motivation, and education), organizational or institutional factors (including supervision, staffing, and access to training), and sociocultural/systemic factors (like community expectations, local governance, and healthcare system limitations).

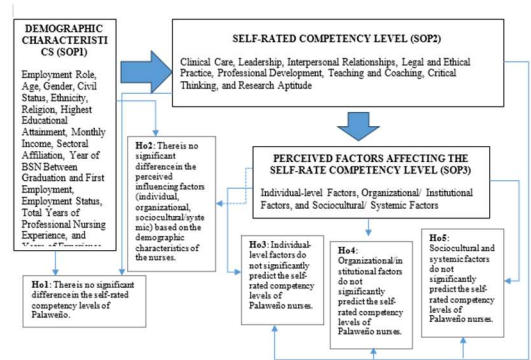


Figure 3. Research paradigm to assess the competency profile of Palaweño nurses.

DEFINITION OF TERMS

For proper and better understanding of this study, the following terms are defined operationally:

Academic Institution. Refers to a sectoral affiliation wherein the nurse is employed in a college or university setting, primarily performing roles related to teaching, academic research, or curricular administration in nursing education. This is categorized under “Sectoral Affiliation” in the demographic profile.

ADDIE Model. A systems-based instructional design model used to plan, implement, and evaluate learning and development processes. It stands for Analysis, Design, Development, Implementation, and Evaluation. In this study, the ADDIE model provides the framework for structuring the research phases, particularly in evaluating nursing competency formation and curriculum design.

Age. Defined as the respondent’s current age in completed years, self-reported during the survey and analyzed using pre-established

brackets. Options: 21–30, 31–40, 41–50, 51–60, 61 and above.

Bachelor of Science in Nursing (BSN).

A four-year undergraduate degree awarded by accredited higher education institutions in the Philippines. It includes academic and clinical training in nursing theory, research, leadership, and community health. In this study, BSN attainment is treated as a demographic and educational variable influencing perceived competency.

Bandura’s Social Cognitive Theory (Self-Efficacy).

A theoretical model emphasizing that self-efficacy—or belief in one’s capacity to succeed—affects motivation, learning, and performance. In this study, it informs the analysis of individual-level factors by linking personal confidence to perceived competency in nursing practice.

Benner’s Novice to Expert Theory.

A theoretical framework positing that nursing competency develops progressively through experiential learning across five stages: Novice, Advanced Beginner, Competent, Proficient, and Expert. This theory is used to explain the developmental nature of competency and supports the study’s investigation of experiential factors influencing self-rated performance.

Civil Status. Refers to the respondent’s legally recognized marital condition at the time of data collection. This demographic variable may influence emotional or financial responsibilities linked to work performance.

Options: Single, Married, Widowed, Divorced/Separated, Others (specify).

Clinical Care. A core competency domain measuring the nurse’s self-rated ability to provide direct patient care, including clinical assessment, care planning, nursing interventions, health monitoring, and evaluation. In this study, this domain is measured through Likert-scale items reflecting everyday clinical procedures and adherence to standards of care.

Collaboration and Therapeutic Practice.

A self-rated competency domain referring to a nurse’s ability to build effective, respectful, and therapeutic partnerships with patients, families, colleagues, and multidisciplinary teams. It is measured through specific items assessing teamwork, cultural competence, and patient-centered care.

Competency (Self-Rated). Defined as the integrated knowledge, attitudes, and skills that a nurse applies to deliver safe and effective care. In this study, competency is measured through a composite score derived from self-assessment across seven domains: clinical care, leadership,

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interpersonal relationships, legal and ethical practice, teaching and coaching, professional development, and critical thinking and research aptitude. A five-point Likert scale is used for rating, with results analyzed as the dependent variable in SOPs 2, 4, and 6.

Contract of Service. An employment category denoting a non-permanent, fixed-term contractual engagement, typically within public health institutions. It implies limited benefits and job security.

Included under: Employment Status.

Critical Thinking and Analysis. A competency domain representing the nurse's ability to reason logically, assess evidence, and make informed clinical decisions. It includes reflective thinking, problem-solving, and integration of information, measured through Likert-scale items capturing cognitive judgment and analytical confidence.

Critical Thinking and Research Aptitude. This domain captures the nurse's perceived capacity to think critically, analyze patient information, and incorporate research evidence into clinical judgment and care decisions. It includes skills such as question formulation, data evaluation, and research utilization. Assessed through items measuring analytical reasoning and knowledge application in real-time practice.

Educational Administration of the Nursing Course. A construct referring to the institutional quality and relevance of the BSN program. It includes the adequacy of curricular content, faculty preparedness, instructional methods, and alignment with local health needs. The study uses this construct to evaluate how nursing education affects competency development.

Employer. The organization where the nurse is employed at the time of the study. This includes hospitals, academic institutions, and health-related agencies in Puerto Princesa City. Employer categories are analyzed to explore differences in competency perceptions across institutional settings.

Employment Role. Refers to the functional position or designation of the respondent within their employing institution. This variable is used to analyze competency differences across hierarchical nursing levels.

Options: Staff Nurse, Supervisor, Department Head, Manager, Academic Faculty.

Employment Status. Describes the respondent's current work arrangement, used to assess employment stability and access to career progression.

Options: Regular/Permanent, Contract of Service, Job Order, Part-Time, Others (specify).

Ethnicity. Refers to the respondent's cultural or ethnolinguistic identity, self-identified and used to understand diversity among participants. Options: Tagalog, Cuyunon, Tagbanua, Visayan, Others (specify).

Gender Self-reported gender identity of the respondent. Options: Male, Female, Others (specify), Prefer not to say.

Head Nurse. A registered nurse occupying a supervisory role in a clinical unit, responsible for managing staff, coordinating care delivery, and ensuring operational efficiency. In this study, the role is categorized under employment designation and analyzed for its association with leadership competency.

Highest Educational Attainment. The most advanced level of formal education completed by the respondent, used to explore links between education and competency.

Options: BSN, MA/MS in Nursing, MA/MS in Other Field, Doctorate, Others (specify).

Individual-Level Factors. Refers to personal attributes believed to affect professional competency. These include age, gender, experience, motivation, self-efficacy, and job satisfaction. Operationalized using Likert-scale items measuring self-perceived internal drivers of nursing performance.

Interpersonal Relationships. A competency domain assessing the nurse's communication skills, empathy, cultural sensitivity, and ability to foster trust with patients, families, and coworkers. Measured using Likert-scale items capturing therapeutic interaction and collaborative teamwork.

Jean Watson's Theory of Human Caring. A nursing theory that emphasizes the humanistic aspects of care, integrating holistic healing, interpersonal relationships, and the spiritual dimension of patient care. Watson's theory is grounded in ten carative factors and places equal importance on both the science and art of nursing. In this study, the theory underpins the assessment of relational and ethical dimensions of nursing competency, especially in the domains of interpersonal relationships and legal and ethical practice.

Job Order. An employment arrangement typically characterized by temporary contracts in public health settings without regular benefits or job tenure.

Included under: Employment Status.

Leadership. A domain evaluating the respondent's perceived ability to lead nursing

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teams, manage resources, enforce protocols, and influence team performance. It includes decision-making, problem-solving, and personnel oversight. Self-rated via Likert-scale items assessing leadership behavior in health settings.

Legal and Ethical Practice. A competency area that measures a nurse's adherence to professional codes, ethical standards, and legal obligations, including confidentiality, patient rights, informed consent, and accountability. This domain is measured by items focusing on ethical decision-making and compliance with nursing laws and regulations.

Monthly Income. The self-estimated gross monthly income of the respondent, categorized using income brackets derived from PSA national classifications.

Options: Low Income, Lower-Middle, Middle, Upper-Middle, High Income.

Nurse Administrator. A nurse holding a managerial or executive position within a healthcare facility, involved in strategic planning, policy implementation, human resource management, and evaluation. The position is examined in relation to self-rated leadership and system-level competencies.

Nurse Competency. A multidimensional construct representing the nurse's ability to perform their duties effectively, ethically, and independently. Operationalized through seven domains—Clinical Care, Leadership, Interpersonal Relationships, Legal and Ethical Practice, Professional Development, Teaching and Coaching, and Critical Thinking and Research Aptitude—each assessed via Likert-scale items. Composite scores are used to evaluate overall proficiency.

Nurse Practitioner. A nurse with postgraduate clinical education and specialized training in advanced practice roles. This includes advanced assessment, diagnostics, treatment planning, and patient education. Respondents identifying as nurse practitioners are classified separately to examine competency patterns linked to advanced training.

Palawean Nurses. Registered nurses born in the province of Palawan, regardless of their current practice location. This classification is used to define the study population and contextualize findings based on shared geographic, cultural, and educational backgrounds.

Organizational/Institutional Factors. Refers to contextual elements within the workplace that may facilitate or hinder nursing performance. These include staffing support, workload, access to training, performance evaluation, and recognition

systems. Measured via Likert-scale items capturing perceived organizational support for competency development.

Perceived Influencing Factors. A composite construct encompassing all variables identified by the nurse as contributing to their competency. It includes three sub-domains—Individual-Level Factors, Organizational/Institutional Factors, and Sociocultural/Systemic Factors—each measured through Likert-scale items. Composite scores for each domain are used as independent variables in the analysis of competency determinants.

Professional Development. A core competency domain referring to the nurse's engagement in lifelong learning, including participation in formal training, pursuit of advanced education, and involvement in professional organizations. Measured through items 6, 28, 31, 55, 56, and 58, it reflects the degree to which nurses invest in continuous knowledge and skill enhancement.

Public Health Nursing Experience. Cumulative duration (in years) spent working in community-based settings such as Rural Health Units (RHUs), Barangay Health Stations (BHS), or public health outreach programs. Used to assess exposure to preventive and promotive care contexts.

Religion. Respondent's declared spiritual or religious affiliation. Options: Catholic, Protestant, Islam, Iglesia ni Cristo (INC), Others (specify).

Sectoral Affiliation. Refers to the specific institutional or sectoral setting where the respondent is currently employed. Options: Government Hospital, Private Hospital, Academic Institution, RHU/BHS, NGO, Others (specify).

Self-Rated Competency. Respondent's own assessment of their ability to perform professional nursing tasks across seven competency domains. This is measured using a five-point Likert scale (Strongly Disagree to Strongly Agree), with a composite score used for overall competency analysis.

Sociocultural and Systemic Factors. A sub-domain of perceived influencing factors that includes external, macro-level conditions affecting nursing practice. These are assessed through items 17–21 and include cultural norms, community expectations, policy constraints, local governance, geographic limitations, and systemic health service issues in Palawan.

Staff Nurse. An entry-level nurse responsible for direct patient care, typically under

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the guidance of a supervisor or unit head. Categorized under Employment Role for analysis.

Supervisor/Manager/Head Nurse.

Refers to nurses in mid- or senior-level supervisory roles who oversee units or teams, manage workflow, ensure quality assurance, and implement institutional protocols.

Teaching and Coaching. A competency domain that measures the nurse's self-rated capacity to instruct, guide, and empower others, including students, junior staff, patients, and communities. Assessed through items 8, 18, 20, 42, 43, and 48, it captures abilities related to communication, demonstration, feedback, and motivation in educational contexts.

Time Interval Between Graduation and First Employment. The number of months or years between the nurse's graduation date and the start of their first nursing job. Used to evaluate employment transition dynamics.

Total Years of Professional Nursing Experience. Cumulative number of years since the nurse began professional practice in any healthcare setting. This variable helps determine the relationship between experience and perceived competency.

Year of BSN Graduation. The calendar year the respondent received their BSN degree. Responses are grouped for analysis by cohort or graduation period.

CHAPTER 2

RESEARCH METHODOLOGY

This chapter consists of six (6) sections, namely Research Design, Ethical Consideration, Instrument, Data Gathering Procedure, Analysis and Interpretation, and Scope and Limitations.

RESEARCH DESIGN

This study adopts a quantitative, cross-sectional correlational design grounded in the post-positivist research paradigm. The post-positivist stance asserts that while objective reality exists, it can only be imperfectly apprehended due to inherent limitations in human observation and measurement (Phillips & Burbules, 2000). Within this worldview, knowledge is considered provisional and probabilistic, gained through empirical observation, hypothesis testing, and critical reflection. This paradigm is particularly suitable for studies that aim to measure latent constructs, such as self-rated professional competency, and to identify statistically significant relationships among observable variables.

The selection of a quantitative approach is justified by the nature of the research objectives and hypotheses, which aim to identify the extent and

direction of influence of specific independent variables (e.g., individual-level factors, organizational conditions, and systemic influences) on a dependent outcome—namely, nurses' perceived competency. As Creswell (2014) emphasizes, quantitative designs are appropriate when the researcher seeks to test theories, examine variable relationships, and use instruments to gather numeric data that can be analyzed statistically. This approach allows for generalizable insights regarding competency development patterns among a defined population of registered nurses in Puerto Princesa City.

A correlational design, specifically, is employed to examine the statistical associations between the independent and dependent variables without manipulating any of the conditions. This design is appropriate when causal inference is not the primary goal, but rather the identification of meaningful relationships and predictors (Gay, Mills, & Airasian, 2012). The correlational strategy is aligned with the study's aim to explore how selected demographic, experiential, institutional, and systemic factors contribute to variations in self-perceived nursing competency, as operationalized through composite scores on multiple competency domains.

The cross-sectional nature of the design refers to the fact that data will be collected at a single point in time from a sample of practicing nurses. This design enables the efficient examination of the research variables as they exist concurrently, rather than over an extended period, and is suitable for assessing current levels of competency and their correlates in real-world practice settings (Bryman, 2016).

The research is further anchored in established theoretical frameworks that inform the design and analysis. Bandura's Social Cognitive Theory, particularly the concept of self-efficacy, underpins the measurement of individual-level motivational and cognitive factors influencing competency (Bandura, 1997). Benner's Novice to Expert Theory provides the developmental scaffold for interpreting professional growth across stages of nursing practice (Benner, 1984), while Jean Watson's Theory of Human Caring supports the assessment of relational and ethical dimensions of care, particularly in culturally grounded settings like Palawan (Watson, 2008). These frameworks collectively inform the conceptual paradigm and shape the formulation of both the research instrument and the analytic plan.

Data will be gathered using a structured self-administered questionnaire designed to assess nurses' self-perceived competency across seven

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domains: clinical care, leadership, interpersonal relationships, legal and ethical practice, professional development, teaching and coaching, and critical thinking and research aptitude. Independent variables will include selected demographic characteristics, professional experience, educational background, employment role, and perceived influencing factors categorized into individual-level, institutional, and sociocultural domains. Each construct is operationalized through multi-item scales rated on a five-point Likert scale. This instrument is developed in reference to existing competency frameworks and validated literature in nursing education and practice (Takase & Teraoka, 2011; Meretoja, Isoaho, & Leino-Kilpi, 2004).

The results from this design are expected to contribute to the empirical understanding of what shapes nursing competency within decentralized healthcare contexts and diverse cultural settings. It is anticipated that the design will enable identification of statistically significant predictors, thereby guiding evidence-informed interventions in nursing education, workforce development, and institutional policy.

RESEARCH INSTRUMENT

This study will employ a structured, self-administered questionnaire as the primary tool for data collection. The instrument will be carefully developed to assess the competency profiles of registered nurses in Palawan and to explore the factors influencing their professional development. It will be constructed based on established frameworks and prior validated tools, and will be organized into three main sections: demographic characteristics, self-rated competency assessment, and perceived influencing factors. These components will be designed to work synergistically, generating both descriptive and inferential insights that will support sector-wide human resource planning and strategic workforce development.

Planned Instrumentation and Questionnaire Development Approach

The ADDIE model will serve as a structured and iterative framework for the design and deployment of the questionnaire, ensuring both methodological rigor and contextual relevance. The Analysis phase will identify the core competencies and contextual factors relevant to the nursing workforce in Palawan. The Design phase will translate these findings into a three-part instrument that will capture demographic data, self-rated competencies, and perceived influencing factors. During the Development phase, validated items from prior studies will be adapted, reviewed by

experts, and pilot-tested to ensure reliability and cultural sensitivity. The Implementation phase will guide the ethical administration of the questionnaire and ensure its inclusive dissemination across various institutional and geographic settings. Finally, the Evaluation phase will facilitate the post hoc validation of the instrument's psychometric properties and will ensure that the questionnaire yields actionable insights while also serving as a replicable tool for future workforce planning. Through this systematic application of the ADDIE model, the questionnaire will function not only as a research instrument but also as a strategic intervention tool aligned with evidence-based human resource development in nursing.

Section I: Demographic Profile of Nurses

The first section will contain 14 items intended to gather baseline demographic and employment-related data from respondents. These will include age, gender, civil status, ethnicity, religion, educational attainment, income bracket, employment role and status, sectoral affiliation, and professional experience both in general and in public health nursing. These data will allow for disaggregated analysis of nurse profiles and will enable correlation with self-assessed competencies and contextual influences. This section will be guided by existing frameworks from the WHO and related institutions emphasizing the role of demographic data in informing human resource planning and forecasting within health systems.

Section II: Self-Rated Competency Inventory for Registered Nurses

The second section will consist of 57 statements distributed across seven key domains of nursing competency: Clinical Care, Leadership, Interpersonal Relations, Legal and Ethical Practice, Professional Development, Teaching–Coaching, and Critical Thinking/Research Aptitude. These domains will be adapted from the validated competency assessment instruments developed by Liu et al. (2009) and Hui et al. (2023), with modifications to suit the Philippine nursing context and the provincial realities of Palawan.

Respondents will be asked to self-assess their level of competence for each item using a 5-point Likert scale: 0 = Lack of competence, 1 = Low competence, 2 = Limited competence, 3 = Sufficient competence, and 4 = Very high competence. The competency statements will reflect both technical and soft skills across different dimensions of professional nursing practice. For example, the Clinical Care domain will cover culturally appropriate care, patient engagement,

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planning and delivering interventions, and outcome evaluation; while the Leadership domain will assess team coordination, delegation, conflict management, and fostering cooperation.

This section will be analytically paired with Section III to investigate how perceived enabling or constraining factors influence self-rated competency levels. The interaction between Sections II and III will allow for inferential analysis exploring relationships between perceived barriers/supports and actual competency outcomes.

Section III: Perceived Influencing Factors

The third section will include 21 statements reflecting individual, organizational, and sociocultural/systemic factors believed to influence nurse competencies. This section will be adapted from the survey developed by Cariaso et al. (2024), which explored contextual factors shaping nurse performance in the Philippines. Participants will rate their agreement with each statement on a 5-point Likert scale: 1 = Strongly disagree to 5 = Strongly agree.

Individual-level factors will include perceptions related to age, gender, self-efficacy, experience, educational attainment, and motivation. Organizational factors will include workplace culture, supervision, resources, staffing practices, and performance evaluation mechanisms. Systemic and sociocultural factors will cover broader determinants such as community expectations, health system challenges, support from local government units, and geographic work conditions. The design of this section will allow for a nuanced understanding of the multilevel ecosystem within which nurses operate.

The interconnection between Section II and Section III will enable the study to examine not only how competent nurses perceive themselves to be, but also what they believe contributes to or hinders the development of those competencies. For example, responses related to resource availability (Section III, Item 12) may correlate with responses under Clinical Care or Critical Thinking domains in Section II. This analytical framework will support multivariate analysis and regression modeling to determine key predictors of high or low competency levels.

Validation and Reliability Procedures

Prior to deployment, the instrument will undergo a validation process involving expert review by five professionals in the fields of nursing education, public health, and human resource management. These experts will evaluate the content for relevance, clarity, comprehensiveness, and cultural appropriateness. Revisions will be

made based on their feedback to enhance construct validity.

A pilot test will be conducted among a small group ($n = 20$) of registered nurses who will not be included in the final sample. This pilot will help ensure that all items are understandable, appropriately worded, and yield sufficient response variation. Data from the pilot test will be used to calculate internal consistency using Cronbach's alpha. It is anticipated that each of the competency subscales and influencing factor groupings will achieve acceptable reliability coefficients ($\alpha \geq 0.70$), based on benchmarks established by Nunnally and Bernstein (1994).

The finalized instrument will serve not only as a diagnostic tool for assessing individual competencies but also as a framework for exploring systemic enablers and constraints within the nursing profession in Palawan. Its design will reflect a comprehensive, systems-based approach to understanding nursing capacity, making it suitable for both academic analysis and policy recommendation in the context of regional health workforce development.

PARTICIPANTS / SAMPLE POPULATION

The participants of this study will consist of licensed registered nurses currently engaged in professional practice across selected healthcare and academic institutions in Palawan, Philippines. Using Slovin's formula with a 10% margin of error, a representative sample of 86 nurses will be drawn from a total population of 606 currently employed nurses across ten institutional categories (Table 1). Inclusion criteria will require participants to: (1) hold an active Professional Regulation Commission (PRC) license; (2) possess a minimum of one year of professional nursing experience; and (3) be currently employed in a healthcare or academic setting in Palawan.

The sample will be selected through stratified purposive sampling, ensuring proportionate representation across institutional types and geographical clusters—namely Northern, Central, and Southern Palawan, including mainland and island hospitals, both public and private. The sample will include nurses from higher education institutions, clinics, and company-employed positions. Proportional allocation will ensure that larger institutions, such as Central Palawan Private Hospital and Northern Palawan Public Hospitals, contribute more participants, while smaller facilities like island-based private hospitals will also be included to preserve diversity.

Additionally, effort will be made to include a subset of head nurses, nurse managers, and faculty to complement responses from clinical

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staff nurses. This strategic sample will support the collection of context-rich data on nursing competencies, perceptions of institutional support, and influencing factors related to workforce development. The resulting data will serve as the foundation for evidence-based recommendations relevant to health sector planning and educational reforms in the province.

Table 1. Population sample allocation table using Slovin's Formula (10% Margin of Error).

Facility Type	Total Number of Nurses	Proportional Sample Size (rounded)	Number of Head Nurses	Selected Head Nurses (Suggested)
Higher Education Institution	72	10	9	2
Northern Palawan Public Hospitals	136	19	9	3
Northern Palawan Private Hospitals	14	2	4	1
Central Palawan Public Hospital	87	12	18	3
Central Palawan Private Hospital	186	26	19	5
Southern Palawan	37	5	14	2

an Public Hospital				
Southern Palawan Private Hospital	24	3	8	1
Island Public Hospitals	22	3	7	1
Island Private Hospitals	9	1	—	—
Clinics, Company Nurses	19	5	6	1
TOTAL	606	86	94 (est.)	19 (suggested)

SAMPLING METHODS AND PROCEDURE

This study will employ a stratified purposive sampling technique to ensure the comprehensive and contextually grounded representation of the nursing workforce across the province of Palawan, Philippines. Informed by a total nursing population of 606 currently practicing registered nurses distributed across ten institutional categories, a representative sample of 86 participants will be selected using Slovin's formula with a 10% margin of error. This sample size will ensure adequate statistical power while preserving the diversity of contexts and roles that influence nursing competencies in the region.

The stratification will be based on two primary variables: type of institutional affiliation and geographic distribution across Palawan's subregions (Northern, Central, Southern, and Island municipalities). Institutions will include government hospitals, private hospitals, higher education institutions (HEIs), and company-based clinical units, capturing a holistic cross-section of healthcare settings. The proportional allocation of sample participants will be derived from the actual number of nurses employed in each sector, ensuring that representation reflects the population structure.

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In the public sector, nurses will be drawn from major facilities such as the Ospital ng Palawan, Roxas Medicare Hospital, Taytay District Hospital, Bataraza District Hospital, and RVM District Hospital in Brooke's Point, among others. These institutions are crucial for understanding nursing competencies in resource-limited, government-run environments, where nurses often manage high patient volumes and complex community health needs.

For the private healthcare sector, facilities such as Adventist Hospital Palawan, Palawan Medical City, and smaller private clinics and hospitals throughout the province will be included. Nurses working in these environments may demonstrate distinct competency patterns shaped by organizational policies, technological resources, and patient demographics typical of private healthcare delivery models.

The higher education sector will involve faculty members and clinical instructors from Palawan's leading nursing schools, namely Palawan State University (PSU), Holy Trinity University (HTU), and Palawan Polytechnic College Institute (PPCI). This subgroup will provide insight into the academic and pedagogical competencies of nurse educators, as well as their perceptions of graduate readiness and professional role development. Additionally, nurses employed in clinics and company-based health units (e.g., mining or tourism companies) will also be represented to capture a range of workplace contexts beyond hospital and academic settings. These roles often combine occupational health, emergency care, and public health functions, especially in remote industrial or rural areas.

Geographically, the sampling procedure will ensure participation from both urban and rural municipalities, including those in Northern Palawan (e.g., Taytay, El Nido), Central Palawan (Puerto Princesa City and nearby areas), Southern Palawan (e.g., Narra, Brooke's Point, Bataraza), and the Island municipalities (e.g., Coron, Cuyo, and Balabac where accessible). This will allow the study to capture the spatial variability of nursing practice, including the logistical and professional challenges associated with healthcare delivery in isolated and underserved communities.

The rationale for employing stratified purposive sampling lies in its ability to generate an information-rich, analytically robust dataset. By ensuring proportional representation across institutional sectors and geographic zones, the study will be positioned to develop a differentiated competency profile that accurately reflects the landscape of nursing practice in Palawan. This

method will also enable the controlled analysis of competency differences across workplace environments and support the formulation of evidence-based recommendations for human resource planning, policy development, and continuing professional education within the provincial health system.

This study will not involve the collection, storage, or disposal of biological specimens. Data will be collected exclusively through a structured, self-administered questionnaire. Completed questionnaires will be handled confidentially, digitized for analysis, and securely stored in password-protected files accessible only to the research team. Hard copies will be kept in a locked cabinet within the principal investigator's office and disposed of through secure shredding three years after completion of the study.

The Principal Investigator (PI) holds relevant academic and professional qualifications in nursing research and community-based health studies, including graduate-level training aligned with the study's methodological approach. The PI's CV (see Appendices) and certifications demonstrate capability to design, implement, and analyze quantitative, correlational studies, as well as to manage associated ethical and methodological risks. Prior facilitation of community health and nursing research projects further establishes competence in safeguarding participant welfare and ensuring rigorous scientific conduct.

Data collection will occur in Palawan across healthcare institutions (government and private hospitals, clinics, higher education institutions, and company-affiliated health units). These sites are suitable given the presence of qualified nursing staff, institutional approval processes, and infrastructure to support safe, ethical administration of the questionnaire. No invasive procedures or laboratory work are required. The participating sites have sufficient staff to coordinate distribution and retrieval of questionnaires without disrupting institutional operations.

Participant involvement will be limited to the time required to complete the self-administered questionnaire, estimated at 30–40 minutes. Data collection will occur at a single point in time (cross-sectional design). The overall study timeline spans approximately six months, covering preparatory activities (instrument validation and pilot-testing), data collection, analysis, and reporting. Individual participants' commitment will therefore be minimal, reducing burden and ensuring feasibility.

INCLUSION AND EXCLUSION CRITERIA

To ensure the generation of contextually grounded, valid, and representative data on the

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competencies of nurses in Palawan, specific inclusion and exclusion criteria will be applied. These criteria will guide the purposive and stratified selection of participants across diverse institutional and geographic contexts in the province, including public hospitals, private healthcare facilities, higher education institutions, and select clinical practice sites such as industrial or company-based clinics.

Inclusion criteria

Participants will be eligible to participate in the study if they meet all of the following conditions:

1. Will be currently licensed as a Registered Nurse by the Professional Regulation Commission (PRC) of the Philippines, thereby ensuring eligibility for active nursing practice and adherence to national regulatory standards.
2. Will be currently employed or formally affiliated with a Palawan-based institution, including government hospitals (e.g., district or provincial health facilities such as Ospital ng Palawan and Roxas Medicare Hospital), private hospitals and clinics (e.g., Adventist Hospital Palawan, Palawan Medical City), higher education institutions offering nursing programs (e.g., Palawan State University, Holy Trinity University, Palawan Polytechnic College), or company-affiliated health units operating in the province.
3. Will have at least one year of continuous full-time experience in their current institutional setting at the time of data collection. This requirement will ensure sufficient professional immersion and familiarity with local operational standards, care delivery systems, and institutional expectations relevant to competency development.
4. Will occupy a professional role related to nursing practice, management, or instruction. Eligible roles will include staff nurses, clinical supervisors, nurse managers, department heads, and academic nursing faculty actively engaged in classroom teaching or clinical instruction.
5. Will be a resident of Palawan or will have practiced continuously in a Palawan-based health or academic institution for a minimum of twelve (12) months prior to participation. This ensures meaningful contextual integration and direct exposure to the province's health service delivery environment.
6. Will be capable of understanding and independently completing the research instrument in either English or Filipino, the official languages in which the questionnaire will be administered.
7. Will voluntarily agree to participate in the study, as evidenced by the signing of an informed consent form, following full disclosure of the study's

objectives, methodology, risks, and ethical safeguards.

Exclusion criteria

The following individuals will be excluded from the study:

2. Nurses who are not currently licensed by the PRC, or whose licenses are expired, suspended, or revoked at the time of data collection.
3. Nurses with less than one year of continuous full-time employment in their current institution, including short-term hires, contractual staff, temporary replacements, rotating interns, or volunteers.
4. Individuals who do not currently occupy nursing-specific roles, including administrative officers, purely managerial personnel without clinical functions, or allied health professionals whose responsibilities do not directly involve nursing care or instruction.
5. Nurses whose place of practice lies outside the geographic jurisdiction of Palawan, even if they are originally from the province or had prior service within its health institutions.
6. Pre-licensure individuals, such as student nurses, recent graduates who have not passed the licensure examination, or individuals undergoing internship without PRC accreditation.
7. Individuals who, due to language difficulties, cognitive limitations, or other personal conditions, will be unable to comprehend the informed consent document or respond reliably to the questionnaire.

This inclusion and exclusion framework will support the development of a rigorously selected, strategically stratified, and demographically inclusive sample. The resulting dataset is expected to yield credible, context-specific insights into the competency landscape of Palawan's nursing workforce and will inform policy, curriculum reform, and strategic human resource development across the health sector.

Withdrawal Criteria

Participants will retain the right to withdraw from the study at any point without penalty or loss of benefits to which they are otherwise entitled. Withdrawal criteria are established to ensure both scientific rigor and participant safety:

1. Voluntary Withdrawal – Participants may discontinue participation at any time if they no longer wish to complete the questionnaire or if they feel uncomfortable continuing, without the need to provide justification.
2. Incomplete or Invalid Responses – Questionnaires that are substantially incomplete, inconsistent, or invalid (e.g., patterned responses without meaningful engagement) will be excluded from analysis to preserve scientific merit.

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3. Emergent Concerns During Data Collection – If a participant demonstrates significant distress while answering questions, the data collection process will be stopped, and the participant will be allowed to withdraw. Supportive referrals will be provided if needed.
4. Withdrawal of Institutional Permission – If an institution rescinds permission for nurse participation before data collection is completed, those participants' responses will not be used, in compliance with institutional governance.
5. Failure to Meet Eligibility After Enrolment – If it is later discovered that a participant does not meet the inclusion criteria (e.g., inactive PRC license, insufficient professional experience), their responses will be withdrawn from the dataset.

All withdrawals will be documented, and any data collected prior to withdrawal will only be retained with explicit participant consent. Where consent is not provided, all identifying and response data will be destroyed to protect confidentiality.

SCOPE AND LIMITATIONS OF THE STUDY

This study will aim to generate an empirically grounded and contextually specific understanding of the competency profiles of registered nurses across Palawan, Philippines. It will further seek to determine the individual, institutional, and systemic factors that influence the development and expression of these competencies. Guided by the ADDIE instructional design framework, the study will integrate a multi-phase approach involving needs analysis, instrument design and development, field implementation, and evaluation. The ultimate objective will be to produce evidence-based recommendations to inform workforce planning, policy formulation, and capacity-building strategies in both healthcare and academic sectors within the province.

The scope of this study will be delineated by its geographic, professional, and thematic boundaries. Geographically, the study will be confined to selected institutional sites across Northern, Central, Southern, and Island Palawan, including both urban and rural municipalities. The institutional settings will comprise public and private hospitals, clinics, and higher education institutions that employ registered nurses. These include, but are not limited to, Ospital ng Palawan, Roxas Medicare Hospital, Bataraza District Hospital, Palawan Adventist Hospital, Palawan Medical City, Palawan State University, Holy Trinity University, and Palawan Polytechnic College. A total of 86 registered nurses will be proportionally selected from these institutions

using stratified purposive sampling, ensuring representation across geographic zones, healthcare sectors, and employment roles.

Professionally, the study will be limited to PRC-licensed registered nurses who will be currently employed in either clinical, academic, or administrative nursing roles. Eligible participants must have at least one year of continuous full-time service in their respective institutions, and must occupy positions such as staff nurse, unit head, nurse supervisor, department manager, or academic faculty engaged in teaching and clinical instruction. This professional delimitation will ensure that the study gathers data from individuals with sufficient contextual knowledge and institutional experience to meaningfully assess their competencies and influencing factors.

Thematically, the study will focus on self-assessed nursing competencies across seven core domains: Clinical Care, Leadership, Interpersonal Relations, Legal and Ethical Practice, Professional Development, Teaching-Coaching, and Critical Thinking/Research Aptitude. The structured questionnaire will also include items related to individual, institutional, and sociocultural factors perceived to affect the development and performance of these competencies. The instrument will be adapted from established tools by Liu et al. (2009), Hui et al. (2023), and Cariaso et al. (2024), and designed in alignment with the ADDIE model to ensure systematic operationalization of each phase—analysis, design, development, implementation, and evaluation.

Despite its comprehensive and methodologically grounded approach, the study will be subject to several limitations. First, the study will employ a cross-sectional survey design using a self-report instrument, which may introduce social desirability and recall biases. Participants may overestimate or underestimate their competencies based on personal perceptions, institutional culture, or expectations of professional image. While psychometric validation and expert review will be employed to mitigate these effects, self-assessment inherently limits objectivity.

Second, the stratified purposive sampling technique, although suited for representing diverse subgroups, will limit the generalizability of findings beyond the specific settings and population of Palawan. The study will not aim to reflect the national nursing landscape or represent provinces with significantly different health systems, workforce policies, or institutional capacities.

Third, institutional participation will depend on administrative permissions, availability

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of staff, and internal support for research engagement. Some healthcare units—particularly those in remote or under-resourced island municipalities—may have reduced participation due to logistical or operational constraints, which could affect the representativeness of the sample despite stratified planning.

Fourth, the reliance on a structured questionnaire will restrict the depth of qualitative understanding. While the instrument will capture patterns and perceived influences, it will not provide detailed insight into nurses' lived experiences, interpersonal dynamics, or the historical and political conditions shaping competency development in their respective institutions.

Lastly, the study will provide a static snapshot of competency profiles and influencing factors at the time of data collection. It will not evaluate the long-term impact of training interventions or workforce reforms. As such, findings will reflect current conditions without measuring competency growth trajectories or the sustained effect of institutional strategies.

Nevertheless, the study will offer a timely and critical contribution to local health systems strengthening and human resource planning in Palawan. By identifying competency strengths, gaps, and contextual factors, it will provide a foundation for the formulation of responsive policies, the design of targeted capacity-building programs, and the promotion of professional excellence among the nursing workforce across the province.

DATA ANALYSIS

The data analysis for this study will employ a comprehensive and methodologically rigorous statistical framework designed to examine the self-rated competency levels of Palaweno nurses and the perceived influencing factors shaping their professional development across healthcare and academic institutions in Palawan. Data collected from the structured questionnaire—which includes three main sections: demographic profile, self-rated nursing competency inventory, and perceived influencing factors—will be entered and processed using R-built Jamovi software (descriptive statistics) and R (higher inferential statistics and predictive modeling), depending on analytic needs and compatibility.

The initial phase of analysis will consist of descriptive statistics to summarize the characteristics of the respondents and provide foundational insights into the data distribution. Frequencies and percentages will be computed for categorical variables (e.g., sex, institutional

affiliation, job role), while measures of central tendency (mean, median) and dispersion (standard deviation, interquartile range) will be reported for continuous or ordinal variables (e.g., age, years of service, competency scores). This step will generate a detailed profile of the respondents and provide a contextualized snapshot of nursing practice and professional competency in Palawan.

Following descriptive analysis, inferential statistics will be applied to address the study's research hypotheses and determine whether statistically significant group differences or predictive relationships exist. To assess whether self-rated competency levels differ according to demographic characteristics (Research Question 4), independent samples t-tests will be used for dichotomous demographic variables (e.g., gender, public vs. private sector). For demographic variables with more than two categories (e.g., years of experience, educational attainment), non-parametric tests such as the Kruskal-Wallis H test will be employed due to violations of normality and homoscedasticity, as assessed using the Shapiro-Wilk test, Levene's test, and visual diagnostics including Q-Q plots and residual histograms (Field, 2018; Pallant, 2020). Where statistical significance is observed, appropriate pairwise comparisons using post hoc procedures for non-parametric data will be conducted.

A similar approach will be applied to Research Question 5, which examines whether perceived influencing factors vary according to nurses' demographic characteristics. Non-parametric tests, including the Mann-Whitney U test for dichotomous groups and the Kruskal-Wallis H test for variables with more than two categories, will be used to compare scores across the three conceptual domains of influencing factors—individual-level, organizational/institutional-level, and sociocultural/systemic-level—across demographic groupings. These analyses will clarify whether perceived enablers or barriers to competency are associated with variables such as experience, institutional context, or geographic origin, providing a more nuanced understanding of workforce dynamics.

To answer Research Question 6, which investigates the predictive strength of perceived factors on nurses' self-rated competency, a logistic regression analysis will be conducted. The outcome variable, overall competency level, will be dichotomized based on theoretical thresholds or sample-based percentiles. Independent variables will include the three domains of perceived factors, entered into the regression model in a hierarchical or stepwise fashion to assess their individual and

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cumulative explanatory power. Checks for multicollinearity, including Variance Inflation Factors (VIFs) and tolerance statistics, will be conducted to ensure the statistical independence of predictors (Tabachnick & Fidell, 2019). Where theoretically justified or interaction effects are detected in preliminary models, interaction terms may be introduced. Model fit and performance will be evaluated using the Hosmer-Lemeshow goodness-of-fit test, Nagelkerke's R^2 , and classification accuracy. Results will be interpreted in terms of adjusted odds ratios with 95% confidence intervals, offering nuanced insights into the relative importance of various factors in shaping nursing competency.

Prior to inferential and predictive analyses, the reliability and internal consistency of all multi-item scales will be evaluated using Cronbach's alpha. A coefficient of 0.70 or higher will be considered acceptable, in line with commonly accepted standards for psychological and educational measurement (DeVellis, 2017; Tavakol & Dennick, 2011). Given the instrument's adaptation from previously validated tools, confirmatory factor analysis (CFA) will not be conducted, particularly due to the modest sample size, which does not meet minimum thresholds for stable parameter estimation (Kline, 2015).

However, face and content validity will have been ensured through expert panel review during the adaptation and contextualization phase. In cases where reliability coefficients fall below acceptable levels, item-level diagnostics and exploratory factor analysis may be considered for interpretation purposes, although not as a central objective of this study. All statistical tests will be conducted at a significance level of $p < 0.05$. Where multiple comparisons are made, Bonferroni or Holm corrections will be applied to adjust for inflated Type I error rates.

Table 2. Cronbach's Alpha Results for Self-Rated Competency and Perceived Influencing Factors Among Palaweno Nurses

Domain	Subdomain	Cronbach's Alpha	Interpretation
Self-Rated Competency	Clinical Care	0.962	Excellent
	Leadership	0.955	Excellent
	Interpersonal Relationships	0.959	Excellent
	Legal/Ethical Practice	0.948	Excellent

	Professional Development	0.947	Excellent
	Teaching-Coaching	0.930	Excellent
	Critical Thinking/Research Aptitude	0.956	Excellent
Perceived Factors Influencing Self-Rated Competency	Individual-Level Factors	0.903	Excellent
	Organizational/Institutional Factors	0.947	Excellent
	Sociocultural & Systemic Factors	0.883	Good

The reliability analysis demonstrated that the questionnaire items used to measure self-rated competency and perceived factors influencing competency among Palaweno nurses exhibited excellent internal consistency. Within the self-rated competency domain, Cronbach's alpha values ranged from 0.930 for Teaching-Coaching to 0.962 for Clinical Care, indicating that all subdomains achieved excellent reliability (Nunnally & Bernstein, 1994). This suggests that the items within each subdomain consistently measure the intended construct, providing confidence in the dependability of the self-assessment data.

For the perceived factors influencing self-rated competency, internal consistency was similarly high, with Cronbach's alpha values ranging from 0.883 for Sociocultural & Systemic Factors to 0.947 for Organizational/Institutional Factors. While the sociocultural and systemic factors domain falls slightly below the 0.90 threshold, it still reflects good reliability, confirming that the instrument adequately captures nurses' perceptions of influences on their competency. The high reliability values across all domains underscore the robustness of the instrument in assessing multidimensional aspects of nursing competency and the contextual factors affecting it (Field, 2018).

Overall, these findings provide a strong psychometric foundation for subsequent analyses and interpretations of nurses' self-rated competency and the factors influencing it. The consistency across multiple domains supports the validity of using these measures to inform human resource planning, professional development strategies, and institutional interventions aimed at strengthening nursing capacity in Palawan.

ETHICAL CONSIDERATIONS

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The ethical considerations of this study are carefully structured to safeguard participants, uphold professional integrity, and ensure that the outcomes meaningfully contribute to nursing practice and community health in Palawan. Because the study examines the self-rated competency levels of nurses and the demographic and contextual factors that shape these competencies, it involves sensitive personal and professional information. The design, therefore, prioritizes privacy, voluntariness, and respect for participants' rights, while also addressing broader responsibilities to institutions and communities.

The protection of privacy and confidentiality is a primary consideration. Since demographic variables such as employment role, income, and years of professional experience are included, strict safeguards will be applied to prevent the identification of individual nurses. All survey responses will be anonymized through coding, and any personal identifiers will be removed before analysis. Data will be stored securely: hard copies in locked cabinets and electronic files on encrypted, password-protected devices accessible only to the research team. Clear data management protocols will govern the lifecycle of information—from collection to storage and final disposal—ensuring that no breach of confidentiality undermines the trust participants place in the study.

The study also recognizes the potential vulnerability of participants. Although nurses are professionals, they may experience discomfort in self-rating competencies or fear negative professional consequences if their responses are disclosed. To mitigate this, the study emphasizes voluntariness: participation is entirely optional, and respondents may skip questions or withdraw at any time without penalty. Assurances will be provided that no data will be shared with employers or institutions in a way that identifies individuals. The survey instrument will be carefully worded to minimize sensitivity and reduce the likelihood of perceived judgment.

A robust approach will be taken to the recruitment process. Recruitment will be conducted in a fair and transparent manner, using professional networks, institutional permissions, and formal communication channels such as hospital administrations, nursing associations, and academic institutions. Identified recruiting parties, such as hospital liaisons or unit heads, will be tasked only with sharing information and coordinating logistics, not exerting pressure on staff to participate. The appropriateness of recruitment strategies will be reviewed to ensure

that participation remains voluntary and free of coercion. Consent forms and information sheets will make clear that nurses' employment or academic standing will not be affected by their decision to participate or not.

The study involves minimal risk, yet all categories of potential harm—physical, psychological, social, and economic—have been considered. Physical risks are absent as the study involves only survey-based data collection. Psychological risks may include mild discomfort in reflecting on one's competencies or in sharing personal demographic details. Social risks include the possibility of reputational harm if responses were ever disclosed, while economic risks are negligible aside from the opportunity cost of time. These risks will be mitigated through strict confidentiality protocols, anonymized reporting, modest compensation for time, and careful wording of survey items. As no experimental intervention is involved, the use of placebo is irrelevant to this study; however, the ethical principle of minimizing harm and avoiding deception, as outlined in the Declaration of Helsinki, underpins all procedures.

Balanced against these risks are the benefits of the study, which are both individual and collective. While participants may not experience direct personal benefits, their involvement will contribute to the advancement of generalizable knowledge about nursing competencies in Palawan. The findings may inform professional development programs, institutional training initiatives, and policy-level interventions, ultimately strengthening the nursing workforce and improving healthcare outcomes in the province. Non-material benefits to participants may also arise: the reflective process of self-rating competencies may prompt personal insights, while study-related dissemination may provide health education or professional development opportunities. Communities will benefit indirectly from improved nursing services, and academic institutions will gain data to support curriculum enhancements.

The study also includes provisions for fair and proportionate compensation. Nurses who devote time to completing the survey will receive a modest token of appreciation. This compensation is designed not as a payment for opinions but as acknowledgment of participants' time and opportunity cost. The amount will be carefully calibrated to avoid undue inducement while ensuring fairness. Similarly, institutional or local facilitators who provide logistical support may receive a small allowance in recognition of their contribution.

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The informed consent process is integral to safeguarding autonomy. Prior to data collection, participants will be fully informed about the study's purpose, objectives, methods, potential risks, and expected benefits. This information will be presented in accessible, non-technical language, through both written information sheets and verbal explanation where necessary. Consent will be documented in writing, but where literacy or other barriers exist, verbal consent will be recorded. Participants will retain a copy of the consent form for reference. Consent is understood not as a one-time event but as an ongoing process; participants will be reminded throughout that they may withdraw without any consequence to their professional standing.

The management of conflicts of interest is also critical. The research team commits to transparency regarding any financial, familial, or proprietary interests that could affect the study. Oversight by the sponsoring institution and ethics review committee will ensure that no conflicts compromise the neutrality of the findings. Intellectual property, authorship, and data-sharing agreements will be clarified at the outset among collaborators to prevent disputes and ensure that contributions are recognized fairly.

Special attention will also be paid to community considerations. The study occurs within a professional and geographic community, and its impact extends beyond individuals to healthcare systems and patient populations. Researchers will remain sensitive to cultural traditions and professional dynamics, ensuring that findings are reported respectfully and without stigmatizing individuals, institutions, or subgroups of nurses. Care will be taken not to burden local institutions with excessive demands or drain their capacity through participation. Instead, the study will seek to empower communities by involving stakeholders in interpreting results and shaping recommendations for interventions. This participatory approach helps ensure that outcomes are relevant, culturally sensitive, and ethically grounded in the lived realities of Palawan nurses.

Insurance considerations are minimal, as the study presents no physical risks requiring medical coverage. Nonetheless, participants will be informed of clear grievance procedures and provided with contact information for both the research team and the institutional ethics oversight body. This ensures that concerns can be raised and addressed appropriately.

CHAPTER 3 ANALYSIS AND DISCUSSION

Problem 1: The demographic profile of Palawean nurses.

This study involved a total of 184 respondents who were distributed across Palawan, representing both Level 1 and Level 2 hospitals (Table 3). The participants were drawn from Level 1 institutions such as the Northern Palawan District Hospital in Taytay, Roxas District Hospital, Baptist Hospital branches in both Roxas and Coron, and the Southern Palawan District Hospital in Aborlan. In addition, respondents were also drawn from the Leoncio General Hospital, and from Level 2 institutions including the Ospital ng Palawan, MMG-PPC Cooperative Hospital, and ACE Medical Center.

Table 3. Frequency table of the demographic characteristics of Palawean nurses in Palawan.

Variable / Category (N=184)	Count (n)	%
Employment Role		
Academic Faculty	8	4.3
Department Head	16	8.7
Manager	5	2.7
Staff Nurse	139	75.5
Supervisor	16	8.7
Age Bracket		
18–24	37	20.1
25–34	66	35.9
35–44	59	32.1
45–54	20	10.9
55 and above	2	1.1
Gender		
Female	134	72.8
Male	50	27.2
Civil Status		
Married	86	46.7
Separated	1	0.5
Single	97	52.7
Ethnicity		
Agutaynen	3	1.6
Cuyunon	43	23.4
Ilonggo	18	9.8
Palaw'an	9	4.9
Tagalog	111	60.3
Other Ethnicities (self-reported)		
Bisaya	4	21.1
Cagayanen	2	10.5
Cagayanos	1	5.3
Ifugao	1	5.3
Ilonggo and Waray	1	5.3
N/A	3	15.8
Pangutaran	2	10.6

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Panimusan	1	5.3
Sama Ubian	1	5.3
Tausog	1	5.3
Tausug	1	5.3
Samarenio	1	5.3
Religion		
Baptist	9	4.9
Born-again Christian	22	12.0
Fundamental Baptist Church	1	0.5
Gospel	1	0.5
Iglesia ni Cristo	13	7.1
Islam	16	8.7
LRC	1	0.5
Latter-day Saints	2	1.0
Protestant (Adventist, Methodist, Jehovah's Witnesses)	18	9.8
Roman Catholic	98	53.3
SDA	1	0.5
SRE	1	0.5
Baptist (duplicate entry)	1	0.5
Highest Educational Attainment		
Bachelor of Science in Nursing (BSN)	114	62.0
Diploma/Certificate in Nursing	3	1.6
Doctorate (PhD/DrPH)	1	0.5
Master of Science in Nursing (MSN)	66	35.9
Monthly Income		
Less than ₱14,560	10	5.4
₱14,560 – ₱29,120	65	35.3
₱29,121 – ₱58,240	88	47.8
₱58,241 – ₱116,480	15	8.2
₱116,481 – ₱232,960	6	3.3
Time Interval Between BSN Graduation & First Employment		
Less than 6 months	97	52.7
6–12 months	59	32.1
More than 12 months	28	15.2
Employment Status		
Contract of Service	79	42.9
Job Order	7	3.8
Part-time	4	2.2
Regular/Permanent	94	51.1
Total Years of Professional Nursing Experience		
0–5 years	92	50.0
6–10 years	33	17.9
11–15 years	31	16.8
16–20 years	20	10.9
21 years and above	8	4.3

Years of Experience in Public Health Nursing		
0–5 years	121	65.8
6–10 years	33	17.9
11–15 years	22	12.0
16–20 years	6	3.3
21 years and above	2	1.1

In terms of employment role, the largest proportion of respondents were staff nurses, which is accounted for nearly three-quarters of the sample (n=139, 75.5%). Department heads and supervisors each represented 8.7% of respondents (n=16 each), while a smaller group worked as academic faculty (n=8, 4.3%). Managers made up the smallest segment (n=5, 2.7%). When examining age distribution, the results showed a relatively youthful but experienced workforce. The largest age group was 25–34 years old (n=66, 35.9%), closely followed by those aged 35–44 (n=59, 32.1%). Younger nurses aged 18–24 also comprised a notable proportion (n=37, 20.1%), while those in the 45–54 age group accounted for 10.9% (n=20). Only a very small proportion were aged 55 and above (n=2, 1.1%).

The findings on gender revealed a workforce predominantly composed of women, with female nurses representing nearly three-quarters of the total sample (n=134, 72.8%). Male nurses accounted for just over a quarter (n=50, 27.2%), reflecting the broader gender imbalance typical of the nursing profession. In terms of civil status, more than half of the respondents reported being single (n=97, 52.7%), while nearly half were married (n=86, 46.7%). Only one respondent reported being separated (0.5%).

The respondents also reported diverse ethnic backgrounds. The majority identified as Tagalog (n=111, 60.3%), followed by Cuyunon (n=43, 23.4%) and Ilonggo (n=18, 9.8%). Smaller proportions identified as Palaw'an (n=9, 4.9%) or Agutaynen (n=3, 1.6%). Several participants also reported belonging to other ethnic groups not originally listed in the survey, including Bisaya (n=4, 2.1% of the "other" subgroup), Cagayanen (n=2, 1.05%), Pangutaran (n=2, 1.06%), and smaller single entries such as Ifugao, Samarenio, Panimusan, Sama Ubian, Tausog, and others.

On the other hand, the distribution of religious affiliation similarly highlighted a predominance of Roman Catholic respondents (n=98, 53.3%). Other sizable groups included Born-again Christians (n=22, 12.0%), Protestants such as Adventists, Methodists, and Jehovah's Witnesses (n=18, 9.8%), and Muslims (Islam, n=16, 8.7%). Smaller proportions identified as

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Iglesia ni Cristo (n=13, 7.1%) and Baptist (n=9, 4.9%). The remaining respondents represented a mix of other denominations and minor groups such as Fundamental Baptist Church, Latter-day Saints, SDA, and SRE, each accounting for less than 1% of the total.

In terms of highest educational attainment, the majority of respondents had completed a Bachelor of Science in Nursing (n=114, 62.0%). A substantial group pursued postgraduate education, with 66 respondents (35.9%) holding a Master of Science in Nursing. Only three participants (1.6%) had attained a diploma or certificate in nursing, while just one had achieved a doctoral-level qualification (0.5%). When asked about their monthly income, most respondents fell within the middle-income categories. Nearly half (n=88, 47.8%) reported earning between ₱29,121 and ₱58,240, while more than a third (n=65, 35.3%) earned between ₱14,560 and ₱29,120. Smaller groups earned between ₱58,241 and ₱116,480 (n=15, 8.2%) or above ₱116,481 (n=6, 3.3%). A small proportion (n=10, 5.4%) reported monthly incomes below ₱14,560.

With respect to the time interval between BSN graduation and first employment, more than half of the respondents (n=97, 52.7%) secured employment within less than six months. Another 32.1% (n=59) found work within 6–12 months, while 15.2% (n=28) took more than a year before entering the workforce. Regarding employment status, nearly equal proportions were split between regular or permanent employees (n=94, 51.1%) and those on temporary or contractual arrangements. Contract of service nurses accounted for 42.9% (n=79), while smaller numbers reported being under job order (n=7, 3.8%) or part-time contracts (n=4, 2.2%).

The findings on total years of professional nursing experience reveal a relatively young yet growing workforce. Half of the respondents (n=92, 50.0%) reported 0–5 years of professional experience, while 17.9% (n=33) had 6–10 years, and 16.8% (n=31) had 11–15 years of experience. Smaller proportions reported 16–20 years (n=20, 10.9%) or more than 21 years of practice (n=8, 4.3%). When narrowing the focus to experience specifically in public health nursing, an even greater concentration in early career stages is apparent. Nearly two-thirds (n=121, 65.8%) reported only 0–5 years of public health experience, while 17.9% (n=33) had 6–10 years, and 12.0% (n=22) had 11–15 years of experience. Very few respondents reported longer careers in this area, with only 3.3% (n=6) having 16–20 years and 1.1%

(n=2) reporting more than 21 years in public health nursing.

The profile of nurses in Palawan paints a picture of a workforce that is young, vibrant, and highly educated, yet still in the early stages of developing the experience and confidence needed for advanced roles. Many of the nurses are early- to mid-career professionals who are bringing fresh knowledge from their education into hospitals and community health settings. While this influx of recent graduates brings energy and updated clinical skills, it also means that mentorship, guidance, and structured professional development are essential to help these nurses build the judgment and expertise required for complex decision-making and leadership (Gong et al., 2022; William et al., 2022).

The predominance of women in the workforce reflects the global trend in nursing, but it also highlights the need to create inclusive career pathways that allow everyone, regardless of gender, to thrive and progress into supervisory and managerial positions (Mwetulundila & Indongo, 2022; Masibo et al., 2024). A nursing workforce that is diverse in experience, gender, and background has the potential to enrich patient care, foster collaboration, and strengthen health systems overall (Stanford, 2020).

One of the most striking aspects of the Palawan nursing workforce is its cultural and ethnic diversity. Nurses come from various ethnolinguistic communities across the Philippines, which can be a great asset in delivering care that is culturally sensitive and responsive to patients' beliefs, traditions, and needs (Rubio, 2019). This diversity also means that hospitals and local health authorities need to support culturally competent training and inclusive policies, so that nurses feel respected and are able to provide patient-centered care effectively (Barral et al., 2023; Nashwan, 2023).

Education levels are high, with many nurses holding bachelor's or even master's degrees. This strong educational foundation equips the workforce to engage in evidence-based practice, lead quality improvement initiatives, and contribute to the advancement of nursing knowledge (Schwendimann et al., 2019; Stayropoulou et al., 2025). However, the early-career stage of most nurses indicates that opportunities for on-the-job training, mentorship, and leadership development will be critical in translating this knowledge into effective patient care and long-term workforce sustainability (Hafsteindóttir et al., 2020).

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The way nurses are employed—split between permanent and contractual arrangements—has implications for both job satisfaction and retention. Permanent positions offer stability and security, but contractual or temporary roles may create uncertainty and stress, potentially affecting performance and engagement (Pressley & Garside, 2023). Supporting nurses through fair employment policies and career development opportunities is essential for building a resilient and committed workforce (Jackson et al., 2025).

Another key aspect of the workforce profile is the relatively rapid transition from graduation to employment. The National Academies of Sciences, Engineering, and Medicine, National Academy of Medicine, & Committee on the Future of Nursing 2020–2030 (2021) argued that most nurses are able to find work soon after completing their studies, which reflects a healthy absorption capacity within the local healthcare system and helps ensure that hospitals and community health programs remain staffed. Yet, the concentration of early-career professionals in public health nursing underscores the need for structured capacity-building, as these nurses are often tasked with essential community-level responsibilities without extensive prior experience.

Problem 2: What is the self-rated competency level of Palaweño nurses in terms of Clinical Care, Leadership, Interpersonal Relationships, Legal and Ethical Practice, Professional Development, Teaching and Coaching, and Critical Thinking and Research Aptitude Domains.

The self-rated competency of Palaweño nurses in the Clinical Care domain reflects a consistent perception of sufficient competence across all assessed indicators (Table 4). Nurses rated themselves highest in providing emotional support to families, with a weighted mean of 3.74, followed closely by involving patients and their families in planning and implementing care ($M = 3.73$). Delivering accurate, comprehensive, and effective nursing interventions ($M = 3.67$) and developing nursing care plans based on primary and secondary data ($M = 3.65$) were also perceived as areas of strength. Competence in utilizing technological advances to improve nursing and health care, as well as identifying and including immediate patient needs in care plans, received slightly lower ratings but remained within the sufficient competence range (both $M = 3.60$). Assessing all health dimensions of the client,

including physical, psychosocial, and spiritual needs, was rated at 3.52, indicating nurses perceive themselves as adequately competent in holistic patient assessment. Detecting and documenting significant changes in a patient's condition ($M = 3.62$) and providing culturally sensitive care ($M = 3.64$) were also considered sufficient.

Table 4. Results of the Self-rated Competency Level of Palaweño Nurses Based on Clinical Care Domain. Verbal Interpretation Scale for Competency: 0.00–0.99 = Lack of competence | 1.00–1.99 = Low competency | 2.00–2.99 = Limited competency | 3.00–3.99 = Sufficient competence | 4.00–5.00 = Very high competence.

Item No.	Dimension 1 – Clinical Care	Weighted Mean	Verbal Interpretation
2	Provides culturally sensitive care	3.64	Sufficient competence
3	Detects and documents significant changes in a patient's condition	3.62	Sufficient competence
5	Gives emotional support to families	3.74	Sufficient competence
9	Assesses all health dimensions of the client (physical, psychosocial, spiritual)	3.52	Sufficient competence
12	Develops a nursing care plan for a specific patient based on primary and secondary data	3.65	Sufficient competence
16	Delivers accurate, comprehensive, and effective nursing interventions in	3.67	Sufficient competence

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	accordance with the plan		
21	Involves the patient and family in the planning and implementation of care	3.73	Sufficient competence
26	Utilizes technological advances to improve nursing and health care	3.60	Sufficient competence
29	Identifies and includes immediate patient needs in the nursing care plan	3.60	Sufficient competence
40	Evaluates the results of nursing care interventions	3.68	Sufficient competence
Overall Weighted Mean		3.65	Sufficient competence

Nurses reported proficiency in delivering culturally sensitive care, detecting and documenting significant changes in patient conditions, and providing emotional support to families, highlighting their capacity to integrate both technical and psychosocial elements into clinical practice. Competence in assessing the full spectrum of client health dimensions—including physical, psychosocial, and spiritual needs—further underscores the holistic orientation of nursing practice in Palawan. Additionally, nurses perceived themselves as capable of developing individualized care plans based on primary and secondary data, implementing effective interventions, and evaluating outcomes in accordance with established care plans. This comprehensive self-assessment reflects alignment with international standards of nursing practice, which emphasize the integration of evidence-based interventions, holistic assessment, and family involvement in care planning as essential for improving patient outcomes (Ambushe et al., 2023; Alotaibi et al., 2024; Sherwood, 2024).

The findings also suggest that Palaweno nurses are effectively utilizing technological innovations to enhance care delivery and systematically addressing immediate patient needs within their care plans. Involvement of patients and families in care planning, as reported in the self-assessment, highlights a participatory approach

consistent with contemporary patient-centered care frameworks, which have been shown to improve adherence, satisfaction, and overall quality of care (Mackintosh et al., 2020; Robinsons et al., 2021). The overall weighted mean indicating sufficient competence suggests that the current nursing workforce possesses a solid foundation for safe, effective, and culturally responsive clinical practice, yet also points to areas where further professional development could reinforce advanced clinical decision-making, care evaluation, and integration of innovative health technologies (Fernández-Castro et al., 2023). Witter et al. (2020) argued that such evidence is critical for sector-wide human resource planning rural areas, like in Palawan, as it identifies both the strengths and potential gaps in clinical competencies that can inform targeted training, mentorship programs, and policy interventions aimed at sustaining high-quality healthcare delivery in the province.

Palaweno nurses also rated themselves as having sufficient competence across all indicators under the Clinical Care domain (Table 5). The highest mean score was recorded for giving emotional support to families ($M = 3.74$), followed closely by involving the patient and family in the planning and implementation of care ($M = 3.73$), and evaluating the results of nursing care interventions ($M = 3.68$). Providing culturally sensitive care ($M = 3.64$), developing a nursing care plan ($M = 3.65$), and delivering comprehensive interventions ($M = 3.67$) also received consistently high ratings within the sufficient competence range. On the other hand, the lowest-rated item was assessing all health dimensions of the client ($M = 3.52$). Similarly, utilizing technological advances ($M = 3.60$) and identifying immediate patient needs in the nursing care plan ($M = 3.60$) had relatively lower but still sufficient levels of competency.

Also, the Palaweno nurses rated themselves as sufficiently competent across all indicators of the Leadership domain. The highest mean score was obtained in promoting cooperation, trust, and open exchange of ideas ($M = 3.81$), followed by acting to develop an atmosphere for teamwork and cooperation ($M = 3.74$) and getting group approval on important matters before acting ($M = 3.74$). Resolving conflict in a positive way ($M = 3.73$) and accepting and using constructive criticism ($M = 3.70$) also received relatively higher ratings.

On the other hand, the lowest-rated competency was delegating responsibility for care based on assessment of individuals' abilities ($M = 3.57$). Identifying and understanding others'

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personal strengths and weaknesses ($M = 3.59$) and coordinating the relation between nurses and related personnel ($M = 3.59$) likewise had lower mean scores but still reflected sufficient competence.

Table 5. Results of the Self-rated Competency Level of Palaweño Nurses Based on Leadership Domain. Verbal Interpretation Scale for Competency: 0.00–0.99 = Lack of competence | 1.00–1.99 = Low competency | 2.00–2.99 = Limited competency | 3.00–3.99 = Sufficient competence | 4.00–5.00 = Very high competence.

Item No.	Dimension – Leadership	Weighted Mean	Verbal Interpretation
13	Identifies and understands others' personal strengths and weaknesses	3.59	Sufficient competence
15	Coordinates the relation between nurses and all related personnel	3.59	Sufficient competence
30	Recognizes others' contributions and achievements	3.67	Sufficient competence
34	Accepts and uses constructive criticism	3.70	Sufficient competence
35	Delegates responsibility for care based on assessment of individuals' abilities	3.57	Sufficient competence
38	Gets group approval on important matters before acting	3.74	Sufficient competence

41	Acts to develop an atmosphere for teamwork and cooperation	3.74	Sufficient competence
45	Promotes cooperation, trust, and open exchange of ideas	3.81	Sufficient competence
51	Resolves conflict in a positive way	3.73	Sufficient competence
Overall Weighted Mean		3.68	Sufficient competence

The findings of this study reveal that Palaweño nurses demonstrated sufficient competence across all domains assessed, with particular strengths in clinical care and leadership. Within the clinical care domain, nurses rated themselves highly in giving emotional support to families, involving patients and families in care planning, and evaluating the outcomes of nursing interventions. These results highlight the centrality of patient- and family-centered care as a core strength of nursing practice in Palawan, reflecting broader trends in global nursing that emphasize holistic and compassionate care delivery (Park et al., 2018). However, relatively lower ratings in areas such as comprehensive health assessment and the utilization of technological advances highlight existing gaps that may require further professional development. Several authors emphasize prior research noting that while Filipino nurses are highly regarded for their interpersonal and caregiving skills, they often encounter challenges in integrating advanced technologies and evidence-based tools into routine practice (Ubas-Sumagaysay & Oducado, 2020; Dela Rosa et al., 2025; Pepito et al., 2025).

The leadership domain further illustrates that Palaweño nurses possess sufficient competency in fostering teamwork, promoting cooperation, and resolving conflicts, with particularly high scores in promoting trust and open communication. This reflects the critical role of nurses not only as care providers but also as leaders within interprofessional teams, ensuring effective collaboration and quality outcomes (Baek et al., 2023). Despite this strength, the moderate ratings in delegating responsibilities and leveraging

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individual team members' abilities point to areas where structured leadership training could be beneficial. Similar observations have been documented in Philippine and international contexts, where nurses demonstrate natural leadership tendencies but require institutional support to fully maximize their leadership capacity in increasingly complex healthcare systems (Alsadaan et al., 2023; Moradi et al., 2024).

These results affirm that Palaweño nurses possess a solid foundation of competency that aligns with both national and global nursing competency standards, particularly in patient-centered care and interpersonal leadership. However, the areas of lower self-rated competence suggest opportunities for continuous education and organizational support, particularly in strengthening advanced assessment skills, technological integration, and strategic leadership practices. Investing in these competencies is vital not only for individual professional growth but also for ensuring that the nursing workforce in Palawan can adequately respond to evolving healthcare demands and contribute to sector-wide human resource planning. As the global nursing frameworks emphasize, enhancing nursing competencies is essential for achieving health equity and sustaining quality care delivery in both local and international contexts (Rosa et al., 2022; Notarnicola et al., 2025).

In the Interpersonal Relation domain, all indicators were rated within the sufficient competence range (Table 6). The highest mean scores were obtained in acknowledging differences in beliefs and cultural practices of individuals or groups ($M = 3.86$) and showing willingness to share workload when needed ($M = 3.86$). Other items with relatively higher means were cooperating with other care providers to meet patient needs ($M = 3.77$), building trust by keeping word, commitments, and promises ($M = 3.74$), and communicating facts, ideas, and feelings to other health team members verbally ($M = 3.73$). Lower but still sufficient ratings were noted in adjusting actions in relation to others' actions ($M = 3.63$), expressing facts and thoughts in writing clearly and in an organized way ($M = 3.59$), and expressing disagreements in a constructive manner ($M = 3.51$).

Table 6. Results of the Self-rated Competency Level of Palaweño Nurses Based on Interpersonal Relation Domain. Verbal Interpretation Scale for Competency: 0.00–0.99 = Lack of competence | 1.00–1.99 = Low competency | 2.00–2.99 = Limited competency | 3.00–3.99 = Sufficient

competence | 4.00–5.00 = Very high competence.

Item No.	Dimension 3 – Interpersonal Relation	Weighted Mean	Verbal Interpretation
4	Expresses facts and thoughts in writing in a clear and organized way	3.59	Sufficient competence
19	Adjusts actions in relation to others' actions	3.63	Sufficient competence
23	Expresses disagreements in a constructive manner	3.51	Sufficient competence
24	Cooperates with other care providers to meet patient needs	3.77	Sufficient competence
32	Communicates facts, ideas, and feelings to other health team members verbally	3.73	Sufficient competence
36	Builds trust by keeping word, commitments, and promises	3.74	Sufficient competence
37	Acknowledges differences in beliefs and cultural practices of individuals/groups	3.86	Sufficient competence
57	Shows willingness to share workload when needed	3.86	Sufficient competence
Overall Weighted Mean		3.71	Sufficient competence

The findings from the Interpersonal Relation domain reveal that Palaweño nurses demonstrate sufficient competence across all

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dimensions, with an overall weighted mean of 3.71. This indicates that while nurses possess a functional capacity in communication, collaboration, and relational skills, these are not yet at an optimal level of mastery. Interpersonal competence has long been recognized as a critical determinant of quality care, as it underpins effective teamwork, enhances patient safety, and facilitates the therapeutic nurse–patient relationship (Mahvar et al., 2020; Baek et al., 2023). In this study, higher competencies were evident in acknowledging cultural differences and willingness to share workload, which reflects the strong relational orientation and collectivist values embedded in Filipino nursing practice (Pasco et al., 2004; Umali et al., 2013; Salinda, 2025).

At the same time, relatively lower ratings in constructive conflict expression and written communication point to important developmental gaps. The ability to manage disagreements constructively is essential for mitigating workplace stress and fostering psychologically safe environments within healthcare teams (Nikitara et al., 2024; Hassanie et al., 2025). Similarly, strong written communication skills are vital for accurate documentation, inter-professional coordination, and the continuity of care, particularly in modern health systems that increasingly rely on digital records and evidence-based reporting (Demsash et al., 2023). The lower scores in these areas may reflect structural challenges in the Philippine health system, including high patient–nurse ratios, limited institutional support for professional writing development, and the undervaluing of reflective communication in clinical training (Alibudbud, 2023). Younas et al. (2023) suggests that while nurses can sustain interpersonal functionality, certain domains of relational competence may be constrained by both systemic and institutional limitations.

From a workforce planning perspective, these results are significant because interpersonal competence directly influences nurse retention, patient outcomes, and organizational performance (Warshawsky et al., 2012; Pressley & Garside, 2023). In rural and underserved contexts, the relational capacity of nurses compensates for systemic gaps in infrastructure and resources, making interpersonal skills a critical asset in sustaining service delivery (Coombs et al., 2022). The sufficient but non-optimal level of competence found here underscores the importance of institutional investments in mentorship programs, conflict management training, and structured professional writing support to strengthen communication pathways across the health system.

As the nursing profession in the Philippines continues to grapple with high migration, workforce shortages, and expanding health demands, enhancing interpersonal relations is central to ensuring that nurses remain effective in both domestic and global healthcare contexts (Lorenzo et al., 2007; Ghimire et al., 2024).

Across the Legal/Ethical Practice domain, Palaweño nurses rated themselves as sufficiently competent, with an overall weighted mean of 3.78 (Table 7). The highest mean score was recorded in ensuring confidentiality and security of written and verbal information acquired professionally ($M = 3.96$), which was the only item assessed within the very high competence range alongside respecting the patient’s right to choice and self-determination in care ($M = 3.93$). Relatively high scores were also obtained in carrying out nursing practice according to legal requirements and organizational policy ($M = 3.81$) and reporting all perceived malpractice incidents to responsible persons ($M = 3.74$). Items such as taking responsibility for one’s own performance ($M = 3.72$) and serving as an advocate for clients’ rights ($M = 3.72$) also received sufficient competence ratings. The lowest mean scores were observed in respecting patients’ right to privacy ($M = 3.69$) and functioning in accordance with legislative and common law affecting nursing practice ($M = 3.69$), though these still fell within the sufficient competence range.

Table 7. Results of the Self-rated competency level of Palaweño nurses based on Legal/Ethical Practice domain. Verbal Interpretation Scale for Competency: 0.00–0.99 = Lack of competence | 1.00–1.99 = Low competency | 2.00–2.99 = Limited competency | 3.00–3.99 = Sufficient competence | 4.00–5.00 = Very high competence.

Item No.	Dimension 4 – Legal/Ethical Practice	Weighted Mean	Verbal Interpretation
10	Carries out nursing practice according to legal requirements and organizational policy	3.81	Sufficient competence
11	Functions in accordance with legislative and common	3.69	Sufficient competence

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	law affecting nursing practice		
27	Takes responsibility for one's own performance	3.72	Sufficient competence
33	Serves as an advocate for the rights of clients or groups	3.72	Sufficient competence
39	Respects the patient's/client's right to privacy	3.69	Sufficient competence
46	Ensures confidentiality and security of written and verbal information acquired professionally	3.96	Very high competence
47	Reports all perceived malpractice incidents to responsible persons	3.74	Sufficient competence
52	Respects the patient's/client's right to choice and self-determination in care	3.93	Very high competence
Overall Weighted Mean		3.78	Sufficient competence

For instance, nurses reported strong adherence to patient-centered ethical principles, particularly in safeguarding confidentiality ($M = 3.96$) and respecting patient choice and self-determination ($M = 3.93$), which were rated as very high competence. These competencies reflect the core values of nursing practice, where the protection of patient rights and autonomy is fundamental to professional accountability (Negash, 2023; Li & Li, 2024). Such findings resonate with the ethical imperatives emphasized globally in the nursing profession, particularly in ensuring dignity, privacy, and respect for all

patients regardless of context (Haddad & Geiger, 2023).

On the other hand, the competencies rated at the sufficient level—such as advocacy for client rights, reporting malpractice, and operating within legislative and organizational frameworks—point to areas where continued capacity building may be necessary. In the Philippines and other low- to middle-income settings, where institutional and systemic constraints, including limited access to legal resources, underreporting of malpractice, and complex health governance systems, can hinder nurses from fully exercising their ethical responsibilities (Corpuz, 2023; Pepito et al., 2025). Moreover, the variability in scores may reflect the tension between nurses' individual ethical convictions and the structural challenges of health systems in resource-limited provinces such as Palawan. In such contexts, nurses often navigate competing demands between administrative compliance, patient care priorities, and limited organizational support, which can affect their confidence in legal and ethical decision-making (Waterfield & Barnason, 2022; Ibrahim et al., 2024).

Generally, Palaweño nurses are competent in safeguarding patients' rights, confidentiality, and ethical standards, but their self-ratings also underscore the need for reinforcing training and institutional support to elevate all areas of legal and ethical practice toward very high competence. Seam et al. (2025) asserted that strengthening continuing professional development, ensuring supportive supervision, and embedding clear ethical protocols within organizations can help bridge the gap between sufficient and exemplary practice. Importantly, these findings contribute to a broader understanding of competency profiles as a foundation for human resource planning, where legal and ethical capacity remains a crucial dimension of nursing care quality and patient safety.

Across the Professional Development domain, Palaweño nurses obtained an overall weighted mean of 3.78, which is within the sufficient competence range (Table 8). The highest score was recorded in recognizing one's own learning needs ($M = 3.95$), falling under very high competence, followed by using learning opportunities for ongoing personal and professional growth ($M = 3.87$). Other indicators that were consistently rated in the sufficient competence range include demonstrating self-awareness of personal strengths and limitations ($M = 3.72$), understanding relevant and current information concerning the health care system ($M = 3.72$),

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displaying self-direction in personal development ($M = 3.72$), and understanding the role of professional organizations and actively participating in them ($M = 3.70$).

Table 8. Results of the Self-rated competency level of Palaweño nurses based on Professional Development domain. Verbal Interpretation Scale for Competency: 0.00–0.99 = Lack of competence | 1.00–1.99 = Low competency | 2.00–2.99 = Limited competency | 3.00–3.99 = Sufficient competence | 4.00–5.00 = Very high competence.

Item No.	Dimension 5 – Professional Development	Weighted Mean	Verbal Interpretation
6	Understands the role of professional organizations and actively participates in them	3.70	Sufficient competence
28	Demonstrates self-awareness of personal strengths and limitations	3.72	Sufficient competence
31	Understands relevant and current information concerning the health care system	3.72	Sufficient competence
55	Uses learning opportunities for ongoing personal and professional growth	3.87	Sufficient competence
56	Recognizes own learning needs	3.95	Very high competence
58	Displays self-direction in personal	3.72	Sufficient competence

	development		
Overall Weighted Mean	3.78	Sufficient competence	

In examining the professional development domain, the findings indicate that Palaweño nurses perceive themselves as demonstrating a generally sufficient level of competence. This domain captures important aspects of lifelong learning, self-awareness, and engagement in professional growth, which are critical attributes of a resilient and adaptive nursing workforce. The highest-rated item pertained to the recognition of personal learning needs, where nurses reported a very high level of competence. This reflects an ability to critically assess their own practice and identify areas for growth, a quality that is strongly associated with professional maturity and readiness for evolving healthcare demands (Farahmand et al., 2022; Anzum & Kibria, 2024). Meanwhile, areas such as participation in professional organizations, self-awareness of strengths and limitations, and maintaining current knowledge of the healthcare system were rated as sufficient rather than very high, suggesting that while nurses are competent in these areas, there may be barriers to achieving stronger engagement, such as resource constraints, organizational support, or limited access to structured opportunities for professional advancement (Kong et al., 2024).

The emphasis on continuous learning and self-directed professional development is consistent with global expectations of nursing practice. The World Health Organization (2025) underscores the importance of lifelong learning in strengthening nursing capacity, particularly in resource-limited and geographically dispersed regions like Palawan. Nurses' sufficient competence in utilizing opportunities for ongoing personal and professional growth demonstrates alignment with these global standards, yet the relatively lower ratings in organizational participation highlight the need to create more enabling environments that foster leadership development and professional networking (Guidert-Lacasa & Vázquez-Calatayud, 2022). Such findings suggest that while individual motivation for growth is present among Palaweño nurses, institutional mechanisms to support professional engagement may require reinforcement. The results point to a workforce that is self-aware, willing to learn, and capable of adapting, but still constrained by systemic factors

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that influence the full expression of professional development competencies.

For the Teaching-Coaching domain, the overall weighted mean was 3.69, interpreted as sufficient competence (Table 9). The highest score was obtained in using opportunities for patient teaching when they arise ($M = 3.83$), followed by coaching junior nurses to meet both task needs and developmental needs ($M = 3.77$) and identifying learning needs of others, including patients, families, and junior nurses ($M = 3.73$). Developing an explicit teaching strategy to teach patients and families ($M = 3.61$) and initiating orientation programs for new nurses ($M = 3.60$) were rated slightly lower. The lowest mean was recorded in taking up the preceptor role to support new nurses adapting to a new working environment ($M = 3.59$), though it remained within the sufficient competence range.

Table 9. Results of the Self-rated competency level of Palaweno nurses based on Teaching-Coaching domain. Verbal Interpretation Scale for Competency: 0.00–0.99 = Lack of competence | 1.00–1.99 = Low competency | 2.00–2.99 = Limited competency | 3.00–3.99 = Sufficient competence | 4.00–5.00 = Very high competence.

Item No.	Dimension 6 – Teaching-Coaching	Weighted Mean	Verbal Interpretation
8	Uses opportunities for patient teaching when they arise	3.83	Sufficient competence
18	Initiates appropriate orientation programs for new nurses	3.60	Sufficient competence
20	Takes up the preceptor role to support new nurses adapting to a new working environment	3.59	Sufficient competence
43	Coaches junior nurses to meet both task needs and their	3.77	Sufficient competence

	developmental needs		
48	Identifies learning needs of others, including patients, families, and junior nurses	3.73	Sufficient competence
42	Develops an explicit teaching strategy to teach patients and families	3.61	Sufficient competence
Overall Weighted Mean		3.69	Sufficient competence

The findings of this study indicate that nurses feel reasonably capable of fulfilling their teaching and coaching responsibilities, particularly in patient education and mentoring junior colleagues. The highest competence was noted in seizing opportunities for patient teaching, which according to some authors highlights the centrality of patient education in nursing practice as a means to promote health literacy and improve patient outcomes (Yang, 2022; McCaskill et al., 2024). Similarly, the relatively strong performance in coaching junior nurses and identifying learning needs demonstrates the value placed on collaborative learning and professional growth within the clinical environment, aligning with international evidence that peer learning and mentorship strengthen workforce resilience and skill transfer (Gumba & Bacarisas, 2025; Ryan et al., 2025).

The slightly lower ratings in areas such as initiating orientation programs and developing explicit teaching strategies may reflect the structural challenges in local hospital systems, such as limited resources, time constraints, or lack of formalized mentorship programs. These findings are consistent with the Kakyo et al. (2022) showing that while nurses often assume informal teaching roles, structured teaching and orientation activities require institutional support and recognition to be fully effective. The lowest rating, though still within the sufficient competence range, was reported in taking up the preceptor role, which could reflect the added responsibilities and pressures of supervising new nurses, particularly in resource-constrained contexts like Palawan. Studies have shown that while preceptorship is

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crucial for developing the competence of novice nurses, the burden it places on experienced staff without adequate institutional support can affect their perceived confidence and performance (Livingstone, 2024; Mashayekh et al., 2024; Wang et al., 2025a).

In the Critical Thinking/Research Aptitude domain, the overall weighted mean was 3.63, which is within the sufficient competence range (Table 10). The highest mean score was obtained in using different ways to search for information ($M = 3.80$), followed by making decisions that reflect both knowledge of facts and sound judgment ($M = 3.69$). Several indicators were rated equally at 3.64, including figuring out more than one way to solve confronting clinical problems, incorporating relevant research findings into nursing practice, and defending decisions using scientific knowledge and principles. Identifying priority risks in clinical situations ($M = 3.61$) and integrating pertinent data from multiple sources ($M = 3.61$) received slightly lower scores. The lowest rating was observed in assisting in clinical research data collection ($M = 3.43$), although it remained within the sufficient competence category.

Table 10. Results of the Self-rated competency level of Palaweño nurses based on Critical Thinking/Research Aptitude domain. Verbal Interpretation Scale for Competency: 0.00–0.99 = Lack of competence | 1.00–1.99 = Low competency | 2.00–2.99 = Limited competency | 3.00–3.99 = Sufficient competence | 4.00–5.00 = Very high competence.

Item No.	Dimension 7 – Critical Thinking/Research Aptitude	Weighted Mean	Verbal Interpretation
1	Identifies priority risks in clinical situations	3.61	Sufficient competence
7	Integrates pertinent data from multiple sources	3.61	Sufficient competence
17	Uses different ways to search for information	3.80	Sufficient competence
22	Figures out more than one way to solve confronting clinical problems	3.64	Sufficient competence

44	Assists in clinical research data collection	3.43	Sufficient competence
49	Makes decisions that reflect both knowledge of facts and sound judgment	3.69	Sufficient competence
53	Incorporates relevant research findings into nursing practice	3.64	Sufficient competence
54	Defends decisions using scientific knowledge and principles	3.64	Sufficient competence
Overall Weighted Mean		3.63	Sufficient competence

Within this domain, the ability to search for information using varied methods was rated highest, reflecting the adaptability of nurses in knowledge acquisition and their capacity to draw from multiple sources to inform practice. Similarly, making decisions that balanced factual knowledge with sound judgment also ranked relatively high, showing that nurses are confident in their ability to exercise clinical reasoning in complex care situations. Competencies such as incorporating research findings into practice, defending decisions through scientific reasoning, and generating multiple solutions to clinical problems were rated equally, indicating a balanced level of proficiency across these higher-order skills. On the other hand, the relatively lower scores in integrating data from multiple sources, identifying priority clinical risks, and especially assisting in research data collection highlight areas where nurses perceive themselves as less confident, though still within the range of sufficient competence. These results resonate with broader findings in nursing education and practice. Critical thinking and research aptitude are essential competencies in evidence-based practice, enabling nurses to synthesize data, evaluate risks, and implement research-informed interventions (Portela Dos Santos et al., 2022).

The fact that Palaweño nurses reported strength in information-seeking behaviors and decision-making reflects the global trend toward promoting evidence-based clinical reasoning as a cornerstone of safe and effective care (Al-Moteri,

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2023). However, the comparatively lower score in research participation mirrors challenges documented in low- and middle-income country settings, where limited opportunities for research training, institutional support, and mentorship can constrain nurses' direct involvement in scholarly inquiry (Lescano et al., 2019; Buser et al., 2021). This finding emphasizes the need to bridge the gap between clinical practice and nursing research in the Philippine context to foster a more research-oriented nursing workforce.

Problem 3: What are the perceived factors that influence the self-rated competency of nurses in terms of Individual-Level Factors, Organizational/Institutional Factors, and Sociocultural and Systemic Factors.

The overall weighted mean score for Individual-Level Factors was 3.90, interpreted as nurses considering these factors to have a clear influence on their competency (Table 11). Among the items, the highest mean score was recorded for participation in continuing professional development (M = 4.14), followed closely by motivation and job satisfaction (M = 4.13), as well as licensure and additional certifications and self-efficacy (both M = 4.08). Years of professional experience (M = 4.03) and educational attainment (M = 3.98) were also rated highly as influential factors. Age was rated with a mean of 3.67, showing that nurses recognized it as an influencing factor, while gender received the lowest mean score of 3.12, indicating uncertainty or divided views on its role in influencing competency.

Table 11. Results of the perceived factors that influence the self-rated competency of Palaweño nurses based on Individual-Level factors. On the 5-point Likert scale, mean scores of: 1.00–1.49 are interpreted as Strongly Disagree (nurses reject the factor as having no influence); 1.50–2.49 are Disagree (nurses see little or minimal influence); 2.50–3.49 are Neutral (nurses are uncertain or divided on its influence); 3.50–4.49 are Agree (nurses consider the factor to have a clear influence); and 4.50–5.00 are Strongly Agree (nurses recognize the factor as a major influence).

Item No.	Individual-Level Factors	Weighted Mean	Verbal Interpretation
1	My age influences my competency as a nurse.	3.67	Nurses consider age to have a clear influence on their competency.

2	My gender influences how competent I feel.	3.12	Nurses are uncertain or divided on whether gender influences their competency.
3	My years of professional experience affect my competency.	4.03	Nurses consider years of professional experience to have a clear influence on their competency.
4	My educational attainment influences my competency.	3.98	Nurses consider educational attainment to have a clear influence on their competency.
5	My licensure and additional certifications enhance my competency.	4.08	Nurses consider licensure and certifications to have a clear influence on their competency.
6	My self-efficacy (confidence in my abilities) affects my competency.	4.08	Nurses consider self-efficacy to have a clear influence on their competency.
7	My motivation and job satisfaction influence my competency.	4.13	Nurses consider motivation and job satisfaction to have a clear influence on their competency.
8	Participation in continuing professional	4.14	Nurses consider participation in continuing professional

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	development improves my competency.		development to have a clear influence on their competency.
Overall Weighted Mean	3.90		Nurses consider individual-level factors to have a clear influence on their competency.

The results indicate that individual-level factors are widely recognized by Palaweno nurses as central to shaping their competency. Elements such as continuing professional development, professional licensure, and certifications were viewed as particularly influential, reflecting how competency is perceived as an evolving construct that requires continuous investment in learning and growth. International literature emphasize that sustained training and professional development directly enhance clinical competency and adaptability in diverse health care environments (Mlambo et al., 2021; Yu et al., 2023; Merry et al., 2023; Shiri et al., 2023). In rural areas like many communities in Palawan, where health systems face uneven resource distribution, the prioritization of lifelong learning becomes especially critical for maintaining high-quality nursing care.

Beyond credentials, the role of psychological and motivational factors emerged as vital. Nurses recognized self-efficacy, job satisfaction, and intrinsic motivation as clear influences on their competency (Wang et al., 2025b). Bandura's (1997) theory of self-efficacy emphasizes how confidence shapes professional performance, and studies confirm that motivated and confident nurses are more likely to demonstrate effective problem-solving, resilience, and commitment to patient care (Shorey & Lopez, 2021; Abusubhiah et al., 2023). Wynn (2025) further affirm that competency extends beyond technical skills to encompass personal drive and emotional engagement in nursing practice, which are essential for sustaining quality care in challenging environments.

The findings also reflect the significance of professional experience and educational attainment. Nurses consistently acknowledged that years of practice and higher levels of education reinforced their competency, underscoring the complementary value of theoretical preparation and

experiential learning. Prior research similarly demonstrates that clinical experience improves decision-making, critical thinking, and patient outcomes, while advanced education enhances evidence-based practice and leadership capacity (Qtait, 2025). This relationship between education, experience, and competency is particularly relevant in regional health systems, where variability in training and resource availability can significantly impact care delivery.

Finally, demographic factors such as gender were met with uncertainty, reflecting divided perceptions of their relevance to competency. This finding reinforces the principle that competency in nursing is not determined by inherent characteristics but rather by professional development, workplace support, and individual agency. Studies across Asia and globally have highlighted that while nursing remains a gendered profession in many contexts, clinical effectiveness is consistently linked to education, training, and psychosocial support rather than demographic attributes (Srivastava, 2025).

In terms of the perceived influence of organizational and institutional factors on the competency of Palaweno nurses, results revealed an overall weighted mean of 4.04, which indicates that nurses considered these factors to have a clear influence on their competency (Table 12). Among the indicators, the highest mean score was obtained for the availability of resources such as staff, equipment, and supplies, with a mean of 4.13. This was closely followed by access to professional development opportunities ($M = 4.11$) and the nurse-to-patient ratio ($M = 4.10$), both of which were also rated highly. Supervision and mentorship, as well as staffing policies including rotations and assignments, each yielded a mean of 4.03. The culture of the workplace and recognition and rewards for good performance both registered mean scores of 3.99, indicating that these institutional environments were also valued as important factors. The lowest but still relatively high mean score was recorded for internal performance evaluations and feedback at 3.92, which still falls within the range of clear influence.

Table 12. Results of the perceived factors that influence the self-rated competency of Palaweno nurses based on Organizational/Institutional factors. On the 5-point Likert scale, mean scores of: 1.00–1.49 are interpreted as Strongly Disagree (nurses reject the factor as having no influence); 1.50–2.49 are Disagree (nurses see little or minimal influence); 2.50–3.49 are Neutral (nurses are uncertain or divided on its influence); 3.50–4.49 are Agree (nurses consider the factor to have a clear

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influence); and 4.50–5.00 are Strongly Agree (nurses recognize the factor as a major influence).

Item No.	Organizational/Institutional Factors	Weighted Mean	Verbal Interpretation
9	Access to professional development opportunities influences my competency.	4.11	Nurses consider access to professional development opportunities to have a clear influence on their competency.
10	Supervision and mentorship affect my competency.	4.03	Nurses consider supervision and mentorship to have a clear influence on their competency.
11	The culture of my workplace influences my competency.	3.99	Nurses consider workplace culture to have a clear influence on their competency.
12	Availability of resources (staff, equipment, supplies) affects my competency.	4.13	Nurses consider the availability of resources to have a clear influence on their competency.

13	Recognition and rewards for good performance influence my competency.	3.99	Nurses consider recognition and rewards to have a clear influence on their competency.
14	The nurse to patient ratio affects how competent I can be.	4.10	Nurses consider nurse-to-patient ratio to have a clear influence on their competency.
15	Staffing policies (rotations, assignments) influence my competency.	4.03	Nurses consider staffing policies to have a clear influence on their competency.
16	Internal performance evaluations and feedback affect my competency.	3.92	Nurses consider internal performance evaluations and feedback to have a clear influence on their competency.
Overall Weighted Mean		4.04	Nurses consider organizational and institutional factors to have a clear influence

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		on their competency.
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This analysis reflects a clear influence across the board seeing that the highest rating was given to the availability of resources such as staffing, equipment, and supplies ($M = 4.13$). It highlights that nurses closely link their ability to demonstrate competence with the adequacy of materials and personnel needed to deliver safe, quality care. A similar emphasis has been documented globally, where shortages in basic resources and chronic understaffing have been shown to compromise professional performance and patient safety outcomes (Alibudbud, 2023; Haddad et al., 2023; Janes et al., 2024; Milesky et al., 2025). Following closely were access to professional development opportunities ($M = 4.11$) and nurse-to-patient ratios ($M = 4.10$), underscoring that continuous training and manageable workloads are fundamental for sustaining high levels of competency. Professional development is not only a vehicle for skill advancement but also a means of preparing nurses to adapt to evolving health challenges, a priority echoed in WHO's call for stronger investment in nursing education and lifelong learning (Flaubert et al., 2021; Mllambo et al., 2021). Similarly, the nurse-to-patient ratio directly shapes both the quality of care delivered and the nurse's capacity to exercise competency, as shown in evidence linking staffing adequacy to reduced mortality and higher job satisfaction (McHugh et al., 2021).

Other organizational elements also received strong acknowledgment from nurses, with supervision and mentorship ($M = 4.03$) and staffing policies such as rotations and assignments ($M = 4.03$) both rated as factors exerting a clear influence. These scores indicate that beyond tangible resources, the structural and managerial support provided through effective leadership and staffing systems contribute significantly to how nurses perceive and sustain their competence. According to some research, mentorship, in particular, has been found to promote confidence, professional socialization, and long-term career retention among nurses (Mariani, 2012; Gularte-Rinaldo et al., 2023). In Palawan, for example, where some nurses are stationed in resource-constrained or geographically isolated facilities, the presence of structured mentorship and fair staffing arrangements becomes even more critical in ensuring that competencies are maintained across diverse practice environments. Workplace culture and recognition of good performance (both $M =$

3.99) were similarly rated as having a clear influence, highlighting that the social and cultural environment within healthcare institutions is integral to sustaining morale and encouraging professional growth. This aligns with international findings that positive organizational culture and meaningful recognition of contributions are strongly tied to job engagement and retention (Jo & Shin, 2025).

While internal performance evaluations and feedback registered the lowest mean score ($M = 3.92$), it still fell within the range of clear influence, indicating that even though nurses perceive evaluation systems as less directly impactful compared to resources and staffing, they nonetheless view structured feedback as relevant for their professional development. Globally, performance evaluation systems have been shown to be effective only when they are constructive, transparent, and embedded within supportive organizational climates (Buljac-Samardzic et al., 2020). The relatively lower rating for this item in Palawan may therefore reflect how evaluations are implemented in practice, but it does not diminish their perceived importance in influencing competency.

These results clearly demonstrate that nurses in Palawan view their competency as inseparable from the organizational environments in which they work. The consistently high ratings across all eight indicators confirm that competency is not simply a matter of individual knowledge or skills, but is embedded within structural conditions that either enable or constrain effective practice. These findings further strongly reinforce the need for a holistic approach to human resource planning in Palawan's health system—one that not only builds individual capacity but also ensures that the institutional and organizational landscape is equipped to support nurses in exercising their competencies fully. This resonates with broader health systems research emphasizing that workforce competency cannot be sustained in isolation from organizational support structures, including adequate resourcing, professional development, supportive leadership, and fair staffing arrangements (Kruk et al., 2018; Figueroa et al., 2019; Zajac et al., 2021; De Vries et al., 2023; Richardson, 2023).

The results show that sociocultural and systemic factors were consistently rated as having a clear influence on the competency of Palawano nurses, with an overall weighted mean of 3.86 (Table 13). The highest mean score was reported for healthcare system challenges such as bureaucracy and policy changes ($M = 3.90$),

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followed by both community expectations ($M = 3.87$) and geographical work setting, whether urban or rural ($M = 3.87$). Stigma or institutional hierarchies and support from local governance and leadership each obtained mean scores of 3.82, which were slightly lower but still within the range of clear influence. All five indicators recorded mean values above 3.80, indicating that nurses consistently recognized sociocultural and systemic conditions as important factors shaping their perceived competency.

Table 13. Results of the perceived factors that influence the self-rated competency of Palaweno nurses based on Sociocultural/Systemic factors. On the 5-point Likert scale, mean scores of 1.00–1.49 are interpreted as Strongly Disagree (nurses reject the factor as having no influence); 1.50–2.49 are Disagree (nurses see little or minimal influence); 2.50–3.49 are Neutral (nurses are uncertain or divided on its influence); 3.50–4.49 are Agree (nurses consider the factor to have a clear influence); and 4.50–5.00 are Strongly Agree (nurses recognize the factor as a major influence).

Item No.	Sociocultural & Systemic Factors	Weighted Mean	Verbal Interpretation
17	Community expectations influence my competency .	3.87	Nurses consider the factor to have a clear influence
18	Healthcare system challenges (bureaucracy, policy changes) affect my competency .	3.90	Nurses consider the factor to have a clear influence
19	Stigma or institutional hierarchies influence my competency .	3.82	Nurses consider the factor to have a clear influence
20	Support from local governance and leadership affects my	3.82	Nurses consider the factor to have a clear influence

	competency .		
21	My geographical work setting (urban vs. rural) influences my competency .	3.87	Nurses consider the factor to have a clear influence
Overall Weighted Mean		3.86	Nurses consider the factor to have a clear influence

Healthcare system challenges, including bureaucracy and policy changes, were rated most strongly, underscoring the ways in which structural inefficiencies and shifting regulations can affect the day-to-day performance and confidence of nurses. Similar findings have been documented in other contexts, where organizational barriers and health system limitations constrained nurses' professional autonomy and limited their opportunities to deliver quality care (Oshodi et al., 2019; Ganchuluun et al., 2023; Mrayyan et al., 2024). Community expectations and the geographical work setting, whether rural or urban, also carried substantial weight in shaping perceptions of competency. In the Philippine, nurses working in rural and remote areas often face resource shortages and heightened community reliance, which can significantly affect their sense of preparedness and their ability to meet professional standards (Alibudbud, 2023; Chavez-Nicer & Faller, 2024).

The influence of stigma, institutional hierarchies, and support from local governance, although slightly lower in mean ratings, also remained strong. These factors point to the broader sociocultural and political environment in which nurses operate, where professional recognition, equity, and leadership support can either enable or constrain competency development. Previous studies have emphasized that inadequate recognition, rigid hierarchies, and inconsistent governance weaken nurses' morale and impede career growth, ultimately limiting health workforce sustainability (Flaubert et al., 2021; Ramsay et al., 2025). The consistency of these results across all indicators demonstrates that the competency of Palaweno nurses cannot be fully understood in isolation from the systemic and sociocultural conditions in which they work. Thus, workforce

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planning and competency development must be approached holistically, integrating not only individual and organizational factors but also the wider community, governance, and policy contexts that deeply shape nursing practice in the broader healthcare system (Barbazza et al., 2015; Mrayyan et al., 2023; Girma et al., 2025).

Problem 4: Is there a significant relationship in the self-rated competency of nurses, categorized into Individual-Level Factors, Organizational/Institutional Factors, and Sociocultural and Systemic Factors.

The correlation analysis demonstrates a strong and statistically significant relationship between nurses' self-rated competency and factors operating at the individual, organizational/institutional, and sociocultural/systemic levels (Table 14). The magnitude of the correlations suggests that nursing competence is best understood as a multidimensional construct shaped by both personal attributes and the broader contexts in which nurses practice. The strongest bivariate association with self-rated competency was observed for organizational and institutional factors (Pearson's $r = 0.799$, $p < .001$), closely followed by individual-level factors ($r = 0.792$, $p < .001$), and sociocultural and systemic factors ($r = 0.702$, $p < .001$). These findings are consistent across both Pearson's and Spearman's coefficients, reinforcing the robustness of the relationships.

Table 14. Correlation between nurses' self-rated competency and multilevel influencing factors. *** indicates highly significant at 0.001.

Self-Rated Competency of Nurses	Pearson's r	Self-Rated Competency of Nurses	Individual Level	Organizational Institutional	Sociocultural and Systemic
Self-Rated Competency of Nurses	Pearson's r	—			
	df	—			
	p-value	—			
	Spearman's rho	—			

	n's rho							
	df	—						
	p-value	—						
Individual Level	Pearson's r	0.792	***	—				
	df	182		—				
	p-value	<.001		—				
	Spearman's rho	0.701	***	—				
	df	182		—				
	p-value	<.001		—				
Organizational Institutional	Pearson's r	0.799	***	0.832	***	—		
	df	182		182		—		
	p-value	<.001		<.001		—		
	Spearman's rho	0.696	***	0.789	***	—		
	df	182		182		—		
	p-value	<.001		<.001		—		
Sociocultural	Pearson's r	0.707	***	0.77	***	0.847	***	—

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and Syst emic	n's	0		4				
	r	2		8				
	df	1		1		18		
		8		8		2		—
		2		2				
	p- val ue	<		<		<.001		—
	Spe ar ma n's rho	0.643	* * *	0.715	* * *	0.811	* * *	—
	df	1		1		18		—
		8		8		2		
		2		2				
	p- val ue	<		<		<.001		—
		.001		.001		.001		

At the individual level, the strong correlation underscores the importance of experience, education, self-efficacy, and engagement in continuing professional development in shaping perceived competence. Prior studies consistently show that nurses with greater clinical exposure and ongoing training report higher confidence and effectiveness in decision-making, leadership, and patient care (Shorey & Lopez, 2021; Zaitoun, 2024; Atalla et al., 2025). This aligns with the view that competence is dynamic and accumulative, developing through reflective practice and lifelong learning rather than being fixed at the point of licensure (Mlambo et al., 2021).

Organizational and institutional factors exhibited the strongest relationship with self-rated competency, highlighting the decisive role of the practice environment. Supportive leadership, access to mentorship, fair workload distribution, and adequate staffing appear to substantially enhance nurses' ability to apply their skills confidently and safely (Phillips et al., 2021; Gularte-Rinaldo et al., 2023). The high intercorrelation between organizational and sociocultural/systemic factors ($r = 0.847, p < .001$) further suggests that institutional conditions are embedded within wider health system structures and governance arrangements, particularly in decentralized or resource-constrained settings (Haddad & Geiger, 2023; Palompon et al., 2024).

The significant association between sociocultural/systemic factors and self-rated competency reflects the influence of cultural

norms, professional status, gender dynamics, and public sector governance on nurses' professional identity and confidence. Evidence indicates that environments characterized by trust, respect, and supportive leadership enhance nurses' perceived legitimacy and competence, whereas hierarchical or inequitable systems undermine professional autonomy (Alsadaan et al., 2023; Gauci et al., 2023).

Collectively, these findings imply that interventions to strengthen nursing competence should move beyond individual skill-building alone. While continuing education remains essential, equal emphasis must be placed on improving organizational support structures and addressing systemic and sociocultural barriers. A holistic, multi-level approach is therefore necessary to sustain and enhance nursing competency, particularly in public health and underserved contexts where contextual constraints strongly shape professional practice.

Problem 5: Is there a significant predictive effect in the self-rated competency of nurses, categorized into Individual-Level Factors, Organizational/Institutional Factors, and Sociocultural and Systemic Factors.

The multiple regression analysis provides robust evidence regarding the predictive effects of individual-level, organizational/institutional, and sociocultural/systemic factors on the self-rated competency of nurses (Table 15). Overall, the model demonstrates excellent explanatory power and statistical adequacy. The regression model was statistically significant ($F(3, 180) = 134, p < .001$), with a strong multiple correlation coefficient ($R = 0.832$). The coefficient of determination indicates that approximately 69.2% of the variance in nurses' self-rated competency is explained by the combined influence of the three predictor domains, with only a minimal reduction after adjustment ($\text{Adjusted } R^2 = 0.686$). This level of explained variance is substantial in social and health sciences research, underscoring the multidimensional yet strongly patterned nature of nursing competence as shaped by personal and contextual factors (Mlambo et al., 2021; Haddad & Geiger, 2023).

Among the predictors, individual-level factors emerged as a statistically significant and meaningful determinant of self-rated competency ($\beta = 0.5063, p < .001$). This finding reinforces existing literature emphasizing the central role of nurses' education, clinical experience, self-efficacy, and engagement in continuous professional development in shaping perceived competence (Shorey & Lopez, 2021; Zaitoun,

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2024; Atalla et al., 2025). Individual attributes such as confidence in clinical judgment, motivation for learning, and accumulated experiential knowledge appear to translate directly into stronger self-assessments of competence. This aligns with theoretical perspectives that conceptualize competence as a developmental construct that evolves through reflective practice and ongoing learning rather than as a static outcome of initial training (Mlambo et al., 2021).

Table 15. Model fit measures of self-rated competency of nurses based on three domains: individual-level factors, organizational/institutional factors, and sociocultural and systemic factors

Section	Indicator / Predictor	Value / Estimate	SE	t / F	df	p-value
Overall model fit	R	0.832	—	—	—	—
	R ²	0.692	—	—	—	—
	Adjusted R ²	0.686	—	—	—	—
	AIC	353	—	—	—	—
	BIC	370	—	—	—	—
	RMSE	0.615	—	—	—	—
	Model F-test	—	—	134.00	3, 180	< .001
Regression coefficients	Intercept	-0.6459	0.2247	-2.875	—	0.005
	Individual level	0.5063	0.0935	5.417	—	< .001
	Organizational/institutional level	0.5119	0.1190	4.263	—	< .001
	Sociocultural/systemic level	0.0340	0.1002	0.339	—	0.735
Influence diagnostics	Cook's distance (mean)	0.00667	—	—	—	—
	Cook's distance (median)	0.00137	—	—	—	—

	Cook's distance (range)	2.50e-7 – 0.171	—	—	—	—
Autocorrelation	Durbin–Watson statistic	2.03	—	—	—	0.914
Collinearity statistics	Individual level (VIF / tolerance)	3.33 / 0.301	—	—	—	—
	Organizational/institutional (VIF / tolerance)	5.18 / 0.193	—	—	—	—
	Sociocultural/systemic (VIF / tolerance)	3.61 / 0.277	—	—	—	—
Normality test	Shapiro–Wilk statistic	0.975	—	—	—	0.002

Organizational and institutional factors also demonstrated a strong and statistically significant predictive effect ($\beta = 0.5511$, $p < .001$), slightly exceeding the individual-level coefficient in magnitude. This highlights the critical influence of the practice environment on nurses' ability to enact and perceive competence. Prior research consistently shows that supportive leadership, adequate staffing, access to mentorship, fair performance evaluation, and opportunities for professional growth enhance both actual performance and perceived competence (Phillips et al., 2021; Gualarte-Rinaldo et al., 2023; Moon et al., 2024). The present findings suggest that even highly skilled nurses may struggle to fully express or recognize their competence in environments characterized by heavy workloads, limited resources, or weak institutional support. Conversely, well-structured organizational systems appear to amplify individual capabilities, enabling nurses to apply their knowledge and skills more confidently and effectively.

In contrast, sociocultural and systemic factors did not exhibit a statistically significant unique predictive effect in the multivariate model ($\beta = 0.0340$, $p = .735$), despite showing strong bivariate correlations with self-rated competency in earlier analyses. This pattern suggests that the influence of sociocultural and systemic conditions may be largely indirect, operating through

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individual and organizational pathways rather than exerting an independent effect when these factors are simultaneously considered. Existing scholarship supports this interpretation, noting that cultural norms, professional status, governance structures, and gender dynamics often shape competence by influencing organizational climates and individual professional identity rather than acting in isolation (Alsadaan et al., 2023; Gauci et al., 2023; Palompon et al., 2024). Thus, while sociocultural and systemic contexts remain important, their effects may be mediated by institutional policies and personal resources.

The diagnostic statistics further support the credibility of the regression results. The Durbin–Watson statistic ($DW = 2.03$, $p = .914$) indicates no evidence of autocorrelation in the residuals, satisfying the assumption of independent errors. Collinearity diagnostics reveal moderate variance inflation factors (VIFs ranging from 3.33 to 5.18), which, while elevated, remain within acceptable thresholds and suggest that multicollinearity is not severe enough to compromise the stability or interpretability of the regression coefficients. This is consistent with the conceptual overlap expected among individual, organizational, and systemic domains in nursing research (Haddad & Geiger, 2023).

Cook's distance values further indicate that no single observation exerted undue influence on the model estimates, with a maximum value of 0.171 well below conventional cut-off thresholds. This supports the robustness of the regression solution and suggests that the findings reflect overall patterns in the data rather than being driven by outliers. The normality of residuals, as assessed by the Shapiro–Wilk test ($W = 0.975$, $p = .002$), indicates a statistically significant deviation from perfect normality. However, visual inspection of the Q–Q plot shows only minor departures at the tails, a common occurrence in large samples. Given the substantial sample size and the robustness of regression estimates to moderate normality violations, this deviation is unlikely to materially affect the validity of the conclusions (Phillips et al., 2021).

The implications of these findings are significant for nursing policy and practice. First, the results affirm that strategies aimed at improving nursing competence should prioritize both individual development and organizational reform. While continuing professional development remains essential, its impact may be constrained without parallel investments in supportive leadership, staffing adequacy, mentorship structures, and fair evaluation systems (Mlambo et

al., 2021; Gualarte-Rinaldo et al., 2023). Second, the non-significant unique contribution of sociocultural and systemic factors suggests that broad structural challenges—such as governance complexity or cultural expectations—may be most effectively addressed through organizational mechanisms that translate macro-level conditions into tangible support for nurses at the point of care (Alsadaan et al., 2023).

In sum, the regression analysis demonstrates that self-rated nursing competency is strongly and predictably shaped by individual-level attributes and organizational/institutional conditions, while sociocultural and systemic influences appear to operate indirectly. These findings reinforce the need for a multi-level but institutionally anchored approach to strengthening nursing competence, particularly in public health and resource-constrained settings where organizational support can either magnify or constrain individual potential.

Problem 6: Is there a significant mediation in the self-rated competency of nurses, categorized into Individual-Level Factors, Organizational/Institutional Factors, and Sociocultural and Systemic Factors.

The mediation analysis provides a nuanced understanding of how individual-level factors influence the self-rated competency of nurses, both directly and indirectly, through organizational/institutional and sociocultural/systemic pathways (Table 16). Using a generalized linear model (GLM) mediation framework with a sample size of 184, the analysis decomposes the total effect of individual-level factors into direct and indirect components, allowing for a more precise interpretation of the mechanisms through which competence is shaped (Figure 4).

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Table 16. GLM Mediation Model of self-rated competency of nurses, categorized into Individual-Level Factors, Organizational/Institutional Factors, and Sociocultural and Systemic Factors (N=184).

Mediators Models								
m 1	Organizational Institutional ~ Individual Level							
m 2	Sociocultural and Systemic ~ Individual Level							
Full Model								
m 3	Self-Rated Competency of Nurses ~ Organizational Institutional + Sociocultural and Systemic + Individual Level							
Indirect Effects								
IE 1	Individual Level ⇒ Organizational Institutional ⇒ Self Rated Competency of Nurses							
IE 2	Individual Level ⇒ Sociocultural and Systemic ⇒ Self Rated Competency of Nurses							
Mediation								
Indirect and Total Effects								
Type	Effect	Estimate	SE	Lower 95% C.I. (a)	Upper 95% C.I. (a)	B	Z p	
Indirect	Individual Level ⇒ Organizational Institutional ⇒ Self Rated Competency	0.44985	0.0095	0.42656	0.47322	0.36131	4.562	<.001

	y of Nurses						
	Individual Level ⇒ Sociocultural and Systemic ⇒ Self Rated Competency of Nurses	0.0247	0.0072	-0.0116	0.0166	0.0200	0.0343 0.732
	Individual Level ⇒ Organizational Institutional	0.8154	0.0400	0.737	0.894	0.8324	20.376 <.001
	Organizational Institutional ⇒ Self Rated Competency of Nurses	0.5511	0.1177	0.320	0.782	0.4362	4.681 <.001
	Individual	0.7262	0.004	0.6	0.8	0.74	15.2 <.0

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	Level ⇒ Sociocultural and Systemic		75	33	19	79	82	01
	Sociocultural and Systemic ⇒ Self-Rated Competency of Nurses	0.0340	0.092	-0.0160	0.028	0.0267	0.033	0.732
Direct	Individual Level ⇒ Self-Rated Competency of Nurses	0.5063	0.094	0.0325	0.0688	0.0491	5.477	<.001
Total	Individual Level ⇒ Self-Rated Competency of Nurses	0.9804	0.0958	0.0871	0.1090	0.0792	17.529	<.001

Note. Confidence intervals computed with method: Standard (Delta method)
 Betas are completely standardized effect sizes

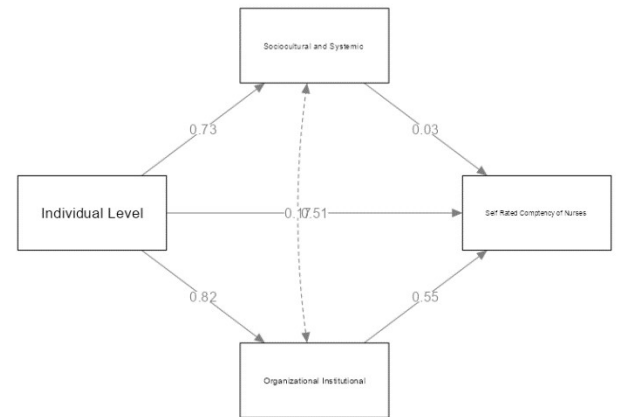


Figure 4. Path model self-rated competency of nurses, categorized into Individual-Level Factors, Organizational/Institutional Factors, and Sociocultural and Systemic Factor.

The total effect of individual-level factors on self-rated competency was large and statistically significant (estimate = 0.9804, $\beta = 0.7922$, $p < .001$), indicating that nurses' personal attributes—such as education, experience, self-efficacy, and engagement in professional development—are strongly associated with how they perceive their own competence (Table 16). This finding is consistent with the broader literature emphasizing competence as a dynamic, experience-driven construct that develops through reflective practice and lifelong learning (Mlambo et al., 2021; Shorey & Lopez, 2021; Atalla et al., 2025). Importantly, the mediation model demonstrates that this strong total effect is not purely direct but is partially transmitted through organizational structures.

The indirect pathway through organizational/institutional factors was statistically significant and substantial (IE = 0.4494, $\beta = 0.3631$, $p < .001$). This indicates that a considerable portion of the effect of individual-level factors on self-rated competency operates by shaping nurses' experiences within their organizations. The component paths clarify this mechanism. Individual-level factors strongly predicted organizational/institutional conditions (estimate = 0.8154, $\beta = 0.8324$, $p < .001$), suggesting that nurses who are more skilled, motivated, and professionally engaged are more likely to access, perceive, or contribute to supportive organizational environments. In turn, organizational/institutional factors had a significant positive effect on self-rated competency (estimate = 0.5511, $\beta = 0.4362$, $p < .001$).

.001). This aligns with evidence that supportive leadership, adequate staffing, mentorship, and fair performance evaluation systems enable nurses to translate personal capabilities into effective practice and higher perceived competence (Phillips et al., 2021; Gualarte-Rinaldo et al., 2023; Moon et al., 2024).

Conceptually, this mediation underscores the role of healthcare institutions as amplifiers of individual capacity. Individual competence alone may be insufficient if organizational conditions constrain autonomy, learning opportunities, or safe practice. Conversely, when institutions provide structural support, individual strengths are more fully realized, reinforcing nurses' confidence in their professional competence (Haddad & Geiger, 2023). The significant mediation effect thus supports a socio-ecological understanding of nursing competence, where individual development and organizational context are deeply interdependent.

In contrast, the indirect effect through sociocultural and systemic factors was not statistically significant ($IE = 0.0247$, $\beta = 0.0200$, $p = .732$). Although individual-level factors significantly predicted sociocultural and systemic conditions (estimate = 0.7262, $\beta = 0.7479$, $p < .001$), sociocultural and systemic factors did not significantly predict self-rated competency when included in the full model (estimate = 0.0340, $\beta = 0.0267$, $p = .732$). This suggests that, while broader cultural norms, governance structures, and societal expectations are closely linked to individual and organizational experiences, they do not exert an independent mediating influence on nurses' self-assessed competence once proximal organizational and individual factors are accounted for.

This finding is theoretically meaningful rather than dismissive of sociocultural and systemic influences. Prior research highlights that cultural values, professional status, gender norms, and health system governance shape nursing practice primarily by influencing organizational climates and professional identity, rather than directly determining day-to-day perceptions of competence (Alsadaan et al., 2023; Gauci et al., 2023; Palompon et al., 2024). The non-significant mediation pathway suggests that sociocultural and systemic factors may function as distal determinants whose effects are largely channeled through institutional policies, leadership practices, and workplace culture. In decentralized or resource-constrained systems, such as public health settings in the Philippines, systemic challenges often manifest concretely as staffing shortages, limited training access, or administrative

burdens—factors already captured within the organizational domain (Haddad & Geiger, 2023).

The direct effect of individual-level factors on self-rated competency remained statistically significant even after accounting for both mediators (estimate = 0.5063, $\beta = 0.4091$, $p < .001$). This indicates partial mediation rather than full mediation. In other words, organizational/institutional factors explain a substantial portion, but not all, of the relationship between individual attributes and perceived competence. This residual direct effect reflects the enduring importance of personal mastery, intrinsic motivation, and self-efficacy in shaping professional self-assessment (Shorey & Lopez, 2021; Zaitoun, 2024). Even in less supportive environments, nurses with strong individual resources may still perceive themselves as competent, though the mediation results suggest that optimal competence is achieved when these individual strengths are reinforced by supportive organizational structures.

The mediation diagram visually reinforces these statistical findings, illustrating strong paths from individual-level factors to both organizational and sociocultural/systemic domains, but a meaningful downstream effect on competency only through the organizational pathway. The relatively large standardized coefficient linking organizational/institutional factors to self-rated competency ($\beta \approx 0.55$) contrasts sharply with the near-zero path from sociocultural/systemic factors, further emphasizing the primacy of the immediate work environment in shaping nurses' competence perceptions.

From a practical and policy perspective, these findings carry important implications. Interventions aimed solely at improving individual skills—such as training programs or continuing professional development—may have limited impact if organizational barriers persist. Conversely, organizational reforms that enhance leadership quality, mentorship, staffing adequacy, and access to learning opportunities can significantly magnify the effects of individual competence (Mlambo et al., 2021; Gualarte-Rinaldo et al., 2023). At the same time, systemic and sociocultural reforms may be most effective when translated into concrete organizational changes rather than addressed in isolation.

In sum, the mediation analysis demonstrates that organizational and institutional factors play a pivotal mediating role in the relationship between individual-level factors and nurses' self-rated competency, while sociocultural and systemic influences operate more distally.

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These results reinforce a multi-level but organization-centered strategy for strengthening nursing competence, particularly in public health and underserved settings where institutional support is critical for transforming individual potential into confident, competent practice.

Problem 7: What interventions or strategies can be proposed to enhance the competency of nurses in Palawan based on the findings of the study?

PALAWAN NURSES COMPETENCY ENHANCEMENT PROGRAM (PNCEP) “Strengthening Individual Capacities through Organizational Systems for Sustainable Nursing Competence”

I. Program Description

The Palawan Nurses Competency Enhancement Program (PNCEP) is a structured, multi-level professional development program designed to improve the **self-rated competency of nurses** by strengthening **individual-level capacities** and **organizational–institutional support systems**. The program is evidence-based and directly responds to the study’s mediation model, which shows that **organizational–institutional factors significantly mediate the relationship between individual-level factors and nurses’ competency**, while sociocultural and systemic factors do not significantly predict competency outcomes.

II. Rationale (Evidence-Based Justification)

The program is justified by the following **significant statistical findings**:

1. **Strong direct effect of Individual Level on Self-Rated Competency**
 - $\beta = 0.4091$, $p < .001$
This confirms that improving nurses’ personal skills, knowledge, confidence, and professional attributes directly enhances competency.
2. **Strong mediating role of Organizational–Institutional Factors**
 - Indirect effect: **0.4494**, $p < .001$
 - Organizational–Institutional $\rightarrow$ Competency: $\beta = 0.4362$, $p < .001$
This indicates that **individual competencies translate into higher performance only when supported by effective organizational systems** (leadership, policies, training structures, supervision).
3. **Non-significant effect of Sociocultural and Systemic Factors on Competency**
 - $\beta = 0.0267$, $p = .732$
Although correlated, these factors do not significantly predict competency when other

variables are controlled; therefore, they are **not prioritized as key intervention areas**.

Conclusion:

To effectively enhance nurses’ competency in Palawan, interventions must **prioritize Individual Level development and Organizational–Institutional strengthening**, with emphasis on organizational mediation.

III. Target Participants

- Staff nurses (government and private hospitals)
- Nurse supervisors and head nurses
- Nurse educators and training officers
- Hospital administrators and nursing service managers

(Estimated participants: 180–200 nurses, aligned with study sample size)

IV. Proposed Budget (Estimated)

Budget Item	Estimated Cost (PHP)
Training materials & modules	250,000
Resource persons & facilitators	300,000
Leadership & mentoring workshops	200,000
Monitoring & evaluation tools	100,000
Administrative & logistics support	150,000
Total Estimated Budget	1,000,000 PHP

V. Program Framework and Implementation Plan

Table 17. Framework of proposed individual, organizational, and sociocultural interventions to enhance the competency of Palaweno nurses based on study findings.

Key Are as (Based on Significant Results)	Obj ectives	Cont ent	Str ate gies	Pers on Assi gned	Ti m e N ee ded	Exp ected Out comes
Indi vidu al-Leve l Clin ical	Enh ance nurs es’ clini cal kno	Evid ence-base d nursi ng pract	Skil ls wor ksh ops, sim ulat	Nur se educ ator s, clini cal	6 m on th s	Imp rove d self-rate d clini

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Competence	Knowledge and technical proficiency	Decision-making, patient safety	Case-based discussions	Specialists		Cal competence and confidence
Individual-Level Professional Development	Strengthen critical thinking, accountability, and self-efficacy	Ethics, reflective practice, stress management, lifelong learning	Seminars, reflective journaling, coaching	Nurse trainers, psychologists	3 months	Increase professional confidence and self-directed learning
Individual-Level Leadership Readiness	Prepare nurses for leadership and supervisory roles	Communication skills, delegation, problem-solving	Leadership boot camps, role-playing	Nurse managers	3 months	Improved leadership readiness and initiative
Organizational Training Systems	Institutionalize continuous competency development	Structured in-service training programs, CPD plans	Policy development, annual training calendars	Hospital administrators, HR	6 months	Sustained competency development system

Organizational Supervision & Mentorship	Strengthen mentoring and performance guidance	Clinical supervision models, mentoring frameworks	Mentor-mentee pairing, regular feedback sessions	Head nurses, senior staff	6 months	Improved transfer of individual skills into practice
Organizational Leadership Support	Enhance managerial support for nursing competence	Transformational leadership, supportive supervision	Leadership training, performance coaching	Nursing directors	4 months	Stronger organizational support for nursing practice
Organizational Policy Alignment	Align institutional policies with competency standards	Competency-based appraisal systems	Policy review workshops	Hospital management	2 months	Clear competency standards and accountability
Monitoring & Evaluation System	Measure competency outcomes and program effectiveness	Competency assessment tools, feedback mechanisms	Surveys, performance reviews	Quality assurance teams	Ongoing	Measurable improvement in self-rated competency

VI. Expected Overall Outcomes

- Significant improvement in **self-rated competency of nurses**
- Stronger alignment between **individual skills and organizational systems**
- Institutionalized **continuous professional development**
- Improved quality of nursing care across healthcare facilities in Palawan
- Evidence-based nursing management practices

Discussion

This discussion examines the determinants of nurses' self-rated competency in Palawan using a GLM mediation framework. The findings provide strong empirical evidence that nurses' competency is shaped primarily by individual-level factors, both directly and indirectly, through organizational–institutional mechanisms, while sociocultural and systemic factors, despite being correlated, do not significantly predict competency when other variables are controlled. These results offer a clear, data-driven basis for designing targeted competency enhancement programs for nurses.

Overall Model Performance

The overall model demonstrates excellent explanatory power, with an R^2 value of 0.692, indicating that approximately 69.2% of the variance in self-rated competency of nurses is explained by the combined effects of individual-level, organizational–institutional, and sociocultural–systemic factors. The model's statistical significance ($F = 134, p < .001$) confirms the robustness and adequacy of the specified predictors. This strong model fit suggests that the framework captures the most relevant dimensions influencing nursing competency within the Palawan context.

Direct Influence of Individual-Level Factors

The results show that individual-level factors exert a strong and statistically significant direct effect on nurses' self-rated competency (Estimate = 0.5063, $\beta = 0.4091, p < .001$). This finding underscores the critical role of personal attributes such as knowledge, skills, confidence, motivation, and professional preparedness in shaping how nurses perceive their competence. The high Pearson correlation between individual-level factors and competency ($r = 0.792, p < .001$) further supports this conclusion.

These findings indicate that nurses who possess stronger individual capacities are more likely to report higher levels of competency, regardless of other contextual influences. This highlights the importance of continuous

professional development, skills enhancement, and personal mastery as foundational elements in improving nursing performance. However, while individual competence is essential, the results suggest that it is not sufficient on its own to maximize competency outcomes.

Organizational–Institutional Factors as a Key Mediator

One of the most important contributions of this study is the identification of organizational–institutional factors as a significant mediator between individual-level factors and self-rated competency. The indirect effect of individual-level factors on competency through organizational–institutional factors is substantial and statistically significant (Indirect Effect = 0.4494, $\beta = 0.3631, p < .001$). This confirms that organizational environments play a crucial role in translating individual nurse capabilities into perceived competence.

Additionally, the direct path from organizational–institutional factors to self-rated competency is significant (Estimate = 0.5511, $\beta = 0.4362, p < .001$), and the correlation between organizational–institutional factors and competency is very strong ($r = 0.799, p < .001$). These findings indicate that supportive institutional structures—such as leadership, training systems, supervision, policies, and resource availability—substantially enhance nurses' ability to apply their individual skills effectively.

The strong relationship between individual-level and organizational–institutional factors (Estimate = 0.8154, $\beta = 0.8324, p < .001$) further suggests that competent individuals are more likely to thrive in environments that recognize, develop, and support their capacities. Conversely, even highly skilled nurses may struggle to achieve optimal competency in the absence of effective organizational systems. This mediation effect emphasizes that organizational investment is essential for sustaining and amplifying individual competence.

Non-Significant Role of Sociocultural and Systemic Factors

Although sociocultural and systemic factors show significant correlations with self-rated competency ($r = 0.702, p < .001$), their direct effect on competency is not statistically significant in the full model (Estimate = 0.0340, $\beta = 0.0267, p = 0.735$). Similarly, the indirect effect of individual-level factors on competency through sociocultural and systemic factors is non-significant (Indirect Effect = 0.0247, $p = .732$).

This finding suggests that while sociocultural and systemic contexts are related to

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both individual and organizational factors, they do not independently predict nurses' competency when individual and organizational influences are accounted for. In practical terms, broader cultural norms or systemic conditions may shape the environment in which nurses operate, but they do not directly enhance or diminish competency unless they are operationalized through organizational structures or individual development.

This result is particularly important for program planning, as it indicates that interventions focusing primarily on sociocultural or macro-systemic changes may have limited direct impact on nurses' competency unless they are translated into concrete organizational practices or individual capacity-building initiatives.

Total Effect and Integrated Interpretation

The total effect of individual-level factors on self-rated competency is very strong and statistically significant (Total Effect = 0.9804, $\beta = 0.7922$, $p < .001$), reflecting the combined direct and mediated influences. This reinforces the conclusion that individual-level competence is the primary driver of nursing competency, but its full potential is realized through organizational-institutional support.

Taken together, the findings support a multilevel but focused approach to competency enhancement. While individual development is indispensable, organizational systems serve as the critical mechanism that enables nurses to translate personal capabilities into effective practice. Sociocultural and systemic factors, though relevant, function more as background influences rather than direct determinants.

Implications for Nursing Competency Programs in Palawan

The results clearly justify the prioritization of individual-level capacity building and organizational-institutional strengthening in any competency enhancement program for nurses in Palawan. Programs should focus on improving nurses' skills, confidence, and professional development while simultaneously reinforcing organizational structures such as leadership, training systems, supervision, and performance management.

By aligning individual competencies with supportive institutional environments, healthcare organizations in Palawan can achieve sustained improvements in nursing competency, ultimately leading to better quality of care and improved health outcomes. The empirical evidence from this study provides a strong foundation for designing targeted, efficient, and evidence-based nursing development interventions.

CHAPTER 4

CONCLUSIONS

Conclusion

This study examined the factors influencing the self-rated competency of nurses in Palawan using a Generalized Linear Model (GLM) mediation framework. The analysis involved 184 nurses and explored the direct, indirect, and total effects of individual-level, organizational-institutional, and sociocultural-systemic factors on nurses' self-rated competency. Overall, the model demonstrated strong explanatory power, accounting for **69.2% of the variance** in nurses' competency ($R^2 = 0.692$), indicating that the selected predictors substantially explain variations in competency levels.

The findings revealed that **individual-level factors** significantly and positively influenced nurses' self-rated competency. The direct effect of individual-level factors on competency was strong and statistically significant ($\beta = 0.4091$, $p < .001$), supported by a high correlation coefficient ($r = 0.792$, $p < .001$). This suggests that nurses' personal attributes, skills, and professional capabilities play a critical role in shaping their perceived competence.

In addition, **organizational-institutional factors** emerged as a significant predictor of nurses' competency ($\beta = 0.4362$, $p < .001$) and demonstrated a strong correlation with self-rated competency ($r = 0.799$, $p < .001$). Importantly, organizational-institutional factors were found to **significantly mediate** the relationship between individual-level factors and self-rated competency. The indirect effect of individual-level factors through organizational-institutional factors was substantial and statistically significant ($\beta = 0.3631$, $p < .001$), indicating that organizational structures and support systems enhance the translation of individual competencies into perceived professional effectiveness.

Conversely, although **sociocultural and systemic factors** were significantly correlated with self-rated competency, their direct effect was not statistically significant in the full model ($\beta = 0.0267$, $p = .735$). Likewise, the indirect effect of individual-level factors on competency through sociocultural and systemic factors was non-significant, suggesting that these factors do not independently predict nurses' competency when individual and organizational influences are considered.

The study concludes that nurses' self-rated competency in Palawan is primarily driven by **individual-level factors**, with **organizational-institutional support playing a critical mediating**

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role. While sociocultural and systemic factors are related to the nursing environment, they do not directly influence competency outcomes in the presence of strong individual and organizational determinants. These findings underscore the importance of developing nurses' personal competencies alongside strengthening organizational systems to achieve sustained improvements in nursing performance.

Implications and Limitations

Implications of the Study

The findings of this study have important implications for nursing practice, management, education, and policy development in Palawan. First, the strong and significant influence of individual-level factors on nurses' self-rated competency underscores the need for continuous professional development initiatives that focus on enhancing nurses' knowledge, skills, confidence, and professional growth. Healthcare institutions should prioritize competency-based training programs that directly address individual learning needs to improve overall nursing performance.

Second, the identification of organizational-institutional factors as a significant mediator highlights the critical role of healthcare organizations in translating individual nurse capabilities into effective practice. This implies that investments in training alone may be insufficient if not supported by strong organizational structures. Hospital administrators and nursing leaders should therefore strengthen leadership practices, supervision mechanisms, training systems, and institutional policies that promote professional growth. Supportive work environments, clear competency standards, and structured mentoring programs can maximize the impact of individual-level competencies on nursing performance.

Third, the non-significant direct effect of sociocultural and systemic factors suggests that broader contextual influences may not directly enhance nurses' competency unless they are operationalized through organizational policies or individual development strategies. This has practical implications for resource allocation, indicating that priority should be given to interventions at the individual and organizational levels, where the strongest effects on competency were observed.

Lastly, the strong explanatory power of the model ($R^2 = 0.692$) implies that the identified factors provide a solid empirical basis for designing evidence-based nursing competency enhancement programs in Palawan. Policymakers and nursing administrators may use these findings to guide

strategic planning and institutional reforms aimed at improving the quality of nursing care.

Limitations of the Study

Despite its strengths, this study has several limitations. First, the use of **self-rated competency** as the outcome variable may introduce response bias, as nurses' perceptions of their competence may not fully reflect actual clinical performance. Future studies may incorporate objective performance assessments to validate self-reported measures.

Second, the study employed a **cross-sectional design**, which limits the ability to establish causal relationships among the variables. While mediation analysis suggests directional relationships, longitudinal or experimental designs are needed to confirm causality.

Third, the sample was limited to **nurses in Palawan**, which may affect the generalizability of the findings to other regions or healthcare settings. Cultural, institutional, and systemic differences may influence competency determinants elsewhere.

Finally, although sociocultural and systemic factors were included in the model, their measurement may not have captured all relevant dimensions influencing nursing practice. Future research may refine these constructs or explore additional variables to further explain nurses' competency outcomes.

Recommendations

Based on the study findings, several recommendations are proposed to enhance nursing competency, optimize workforce development, and strengthen healthcare delivery in Palawan:

1. Individual-Level Interventions
 - Implement structured continuing professional development (CPD) programs that focus on evidence-based clinical care, ethical decision-making, leadership, patient-centered practices, and advanced technological skills.
 - Establish simulation- and scenario-based training initiatives to enhance experiential learning, critical thinking, clinical judgment, teamwork, and communication in high-stakes clinical environments.
 - Develop mentorship and peer coaching programs pairing early- and mid-career nurses with experienced practitioners to facilitate skill acquisition, professional socialization, ethical guidance, and career development.
 - Promote active engagement in research, including journal clubs, case studies, and individual or collaborative projects, to strengthen critical

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- thinking, evidence-based practice, and analytic reasoning.
2. Organizational and Institutional Strategies
 - Optimize staffing levels, equipment availability, and technological resources to create supportive environments that reinforce individual competencies and ensure safe, efficient patient care.
 - Offer leadership, team management, and interpersonal skills training to address gaps in delegation, conflict resolution, and effective collaboration within multidisciplinary teams.
 - Institutionalize mentorship policies, linking mentoring activities to career progression, performance evaluations, and formal recognition to encourage participation and sustain professional development.
 - Implement incentives for professional growth, including CPD sponsorship, recognition awards, structured advancement pathways, and opportunities for skill diversification.
 3. Sociocultural and Systemic Interventions
 - Integrate cultural competence and diversity training that addresses ethnolinguistic, religious, and community-specific considerations to enhance patient-centered care, ethical decision-making, and communication.
 - Facilitate engagement with local governance, healthcare authorities, and community stakeholders to improve understanding of systemic challenges, resource allocation, policy implementation, and advocacy capacity.
 - Embed structured community and system-oriented modules into professional development programs to align nursing practice with contextual realities, enhance community trust, and improve patient outcomes.
 4. Policy and Workforce Planning
 - Design human resource strategies that account for variations in education, religion, and employment status to ensure equitable access to professional development opportunities and support mechanisms.
 - Establish monitoring and evaluation systems, including pre- and post-competency assessments, mentorship logs, CPD participation records, and patient satisfaction metrics, to track competency progression and institutional effectiveness.
 5. Future Research Directions
 - Conduct longitudinal and mixed-methods studies to validate self-rated competency against observed performance, explore the long-term impact of interventions, and capture in-depth qualitative insights into cultural, organizational, and systemic influences on professional practice.
 - Investigate the efficacy of multi-level interventions in diverse healthcare settings, including rural and community-based facilities, to inform scalable and sustainable competency enhancement frameworks.

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APPENDICES A

May 08, 2025

RICARDO B. PANGANIBAN, MD

City Health Officer
Province of Palawan

Dear Dr. Panganiban,

Greetings!

The undersigned is taking up her Doctor of Philosophy in Nursing at the Philippine Womens University. The undersign would like to ask permission to allow her to conduct her study entitled **“Competency Profiles of Nurses in Palawan: A Basis for Sector-Wide Human Resource Planning and Support”**, in your office.

The findings of this study will be given an idea about the increasing trend of teenage pregnancy. The study will also serve as data base for future researchers and a reference point for policy makers to use in terms of issues relating to teenage pregnancy.

This is only a survey data, but an important baseline data for the future researches along this line. Your approval on this matter will be greatly appreciated, and any inquiry related to this, please feel free to contact her at your convenient time.

Be assured that all information gathered will be treated as highly and strictly confidential.

Thank you and more power.

Very Truly yours,

(Sgd.) ROY ALBERT N. ACOSTA

Researcher

May 08,2025

FAYE ERIKA QUERIJERO-LABRADOR, MD,MHA

Provincial Health Officer II
Province of Palawan

Dear Dr. Labrador,

Greetings!

The undersigned is taking up her Doctor of Philosophy in Nursing at the Philippine Women’s University. The undersign would like to ask permission to allow her to conduct her study entitled **“Competency Profiles of Nurses in Palawan: A Basis for Sector-Wide Human Resource Planning and Support”**, in your office.

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Navigating Workforce Needs: A Comprehensive Analysis of Nurse Competencies in Palawan

This is only a survey data, but an important baseline data for the future researches along this line. Your approval on this matter will be greatly appreciated, and any inquiry related to this, please feel free to contact her at your convenient time.

Be assured that all information gathered will be treated as highly and strictly confidential.

Thank you and more power.

Very Truly yours,

(Sgd.) ROY ALBERT N. ACOSTA
Researcher

May 08,2025

KENNETH WILSON O. LIM, MD
Medical Director
Allied Care Experts (ACE) Medical Center -Palawan

Dear Dr. Lim,

Greetings!

The undersigned is taking up her Doctor of Philosophy in Nursing at the Philippine Womens University. The undersign would like to ask permission to allow her to conduct her study entitled **“Competency Profiles of Nurses in Palawan: A Basis for Sector-Wide Human Resource Planning and Support”**, in your office.

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Thank you and more power.

Very Truly yours,

(Sgd.) ROY ALBERT N. ACOSTA
Researcher

Navigating Workforce Needs: A Comprehensive Analysis of Nurse Competencies in Palawan

May 08, 2025

PAUL S. CASTILLO, MD, FPCS

Medical Director

Palawan Medical Mission Group Multipurpose Cooperative (PMMGMPC)

Dear Dr. Castillo,

Greetings!

The undersigned is taking up her Doctor of Philosophy in Nursing at the Philippine Womens University. The undersign would like to ask permission to allow her to conduct her study entitled **“Competency Profiles of Nurses in Palawan: A Basis for Sector-Wide Human Resource Planning and Support”**, in your office.

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Thank you and more power.

Very Truly yours,

(Sgd.) ROY ALBERT N. ACOSTA

Researcher

May 08,2025

MARIJOE S. PIALAGO, MMBM

President

Adventist Hospital - Palawan

Dear Madam,

Greetings!

The undersigned is taking up her Doctor of Philosophy in Nursing at the Philippine Womens University. The undersign would like to ask permission to allow her to conduct her study entitled **“Competency Profiles of Nurses in Palawan: A Basis for Sector-Wide Human Resource Planning and Support”**, in your office.

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Thank you and more power.

Very Truly yours,

(Sgd.) ROY ALBERT N. ACOSTA
Researcher

May 08,2025

MELECIO N. DY, MD, MPH, CESE
Medical Center Chief II
Ospital ng Palawan

Dear Dr. Dy,

Greetings!

The undersigned is taking up her Doctor of Philosophy in Nursing at the Philippine Womens University. The undersign would like to ask permission to allow her to conduct her study entitled “**Competency Profiles of Nurses in Palawan: A Basis for Sector-Wide Human Resource Planning and Support**”, in your office.

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Thank you and more power.

Very Truly yours,

(Sgd.) ROY ALBERT N. ACOSTA
Researcher

Navigating Workforce Needs: A Comprehensive Analysis of Nurse Competencies in Palawan

May 08,2025

MAJ. WILFREDO S. ABULENCIA, MD

Camp Artemio Recarte Station Hospital
Wescom Road, Brgy. San Miguel, Puerto Princesa, Palawan

Dear Maj. Abulencia,

Greetings!

The undersigned is taking up her Doctor of Philosophy in Nursing at the Philippine Womens University. The undersign would like to ask permission to allow her to conduct her study entitled **“Competency Profiles of Nurses in Palawan: A Basis for Sector-Wide Human Resource Planning and Support”**, in your office.

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Thank you and more power.

Very Truly yours,

(Sgd.) ROY ALBERT N. ACOSTA

Researcher

May 14, 2025

JUVELITO C. ANG, MD

Chief, Northern Palawan Provincial Hospital
Taytay, Palawan

Dear Dr. Ang,

Greetings!

The undersigned is taking up her Doctor of Philosophy in Nursing at the Philippine Womens University. The undersign would like to ask permission to allow her to conduct her study entitled **“Competency Profiles of Nurses in Palawan: A Basis for Sector-Wide Human Resource Planning and Support”**, in your office.

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Be assured that all information gathered will be treated as highly and strictly confidential.

Thank you and more power.

Very Truly yours,

(Sgd.) ROY ALBERT N. ACOSTA
Researcher

May 12, 2025

ROBERTO ANGELO A. ARRIETA, MD, CHA, DIPHLM
El Nido Community Hospital
Brgy. Pasadeña, El Nido, Palawan

Dear Dr. Arrieta,

Greetings!

The undersigned is taking up her Doctor of Philosophy in Nursing at the Philippine Womens University. The undersign would like to ask permission to allow her to conduct her study entitled **“Competency Profiles of Nurses in Palawan: A Basis for Sector-Wide Human Resource Planning and Support”**, in your office.

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Thank you and more power.

Very Truly yours,

(Sgd.) ROY ALBERT N. ACOSTA
Researcher

May 16, 2025

JEREMY LAGUDA, MD, MMHoA
OIC Chief, Roxas Medicare Hospital
Roxas, Palawan

Dear Dr. Laguda,

Greetings!

The undersigned is taking up her Doctor of Philosophy in Nursing at the Philippine Women’s University. The undersign would like to ask permission to allow her to conduct her study entitled **“Competency Profiles of Nurses in Palawan: A Basis for Sector-Wide Human Resource Planning and Support”**, in your office.

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Thank you and more power.

Very Truly yours,

(Sgd.) ROY ALBERT N. ACOSTA
Researcher

May 16, 2025

PETER MCGERALD E. PENULLAR
Chief, San Vicente District Hospital
San Vicente, Palawan

Dear Dr. Penullar,

Greetings!

The undersigned is taking up her Doctor of Philosophy in Nursing at the Philippine Women's University. The undersign would like to ask permission to allow her to conduct her study entitled "**Competency Profiles of Nurses in Palawan: A Basis for Sector-Wide Human Resource Planning and Support**", in your office.

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Thank you and more power.

Very Truly yours,

(Sgd.) ROY ALBERT N. ACOSTA
Researcher

Navigating Workforce Needs: A Comprehensive Analysis of Nurse Competencies in Palawan

May 20,2025

AMABEL B. LABOR, MD

Hospital Chief, Southern Palawan Provincial Hospital
Brooke's Point, Palawan

Dear Dr. Labor,

Greetings!

The undersigned is taking up her Doctor of Philosophy in Nursing at the Philippine Womens University. The undersign would like to ask permission to allow her to conduct her study entitled **“Competency Profiles of Nurses in Palawan: A Basis for Sector-Wide Human Resource Planning and Support”**, in your office.

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Thank you and more power.

Very Truly yours,

(Sgd.) ROY ALBERT N. ACOSTA

Researcher

May 19, 2025

STENELY O. MANUEL, MD

Chief, Aborlan Medicare Hospital
Aborlan, Palawan

Dear Dr. Manuel,

Greetings!

The undersigned is taking up her Doctor of Philosophy in Nursing at the Philippine Women's University. The undersign would like to ask permission to allow her to conduct her study entitled **“Competency Profiles of Nurses in Palawan: A Basis for Sector-Wide Human Resource Planning and Support”**, in your office.

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Navigating Workforce Needs: A Comprehensive Analysis of Nurse Competencies in Palawan

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Thank you and more power.

Very Truly yours,

(Sgd.) ROY ALBERT N. ACOSTA
Researcher

May 21, 2025

NELIA T. DIESTA, MD, MHA
OIC-Chief, Dr. Jose Rizal District Hospital
Rizal, Palawan

Dear Dr. Diesta,

Greetings!

The undersigned is taking up her Doctor of Philosophy in Nursing at the Philippine Women's University. The undersign would like to ask permission to allow her to conduct her study entitled "**Competency Profiles of Nurses in Palawan: A Basis for Sector-Wide Human Resource Planning and Support**", in your office.

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Thank you and more power.

Very Truly yours,

(Sgd.) ROY ALBERT N. ACOSTA
Researcher
May 23, 2025

ARTURO C. CUNANAN, MD, MPH, FLPS, CSEE, Ph. D
Chief, Culion Sanitarium and General Hospital Culion, Palawan
Culion, Palawan

Dear Dr. Cunanan,

Greetings!

Navigating Workforce Needs: A Comprehensive Analysis of Nurse Competencies in Palawan

The undersigned is taking up her Doctor of Philosophy in Nursing at the Philippine Womens University. The undersign would like to ask permission to allow her to conduct her study entitled **“Competency Profiles of Nurses in Palawan: A Basis for Sector-Wide Human Resource Planning and Support”**, in your office.

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Thank you and more power.

Very Truly yours,

(Sgd.) ROY ALBERT N. ACOSTA
Researcher

May 28, 2025

RYAN RUIZ, MD, MPH
Chief, Coron District Hospital
Coron, Palawan

Dear Dr. Ruiz,

Greetings!

The undersigned is taking up her Doctor of Philosophy in Nursing at the Philippine Women’s University. The undersign would like to ask permission to allow her to conduct her study entitled **“Competency Profiles of Nurses in Palawan: A Basis for Sector-Wide Human Resource Planning and Support”**, in your office.

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Very Truly yours,

Navigating Workforce Needs: A Comprehensive Analysis of Nurse Competencies in Palawan

(Sgd.) ROY ALBERT N. ACOSTA

Researcher

May 27, 2025

ELVIE B. SORIANO, MD

Berachah General Hospital, Inc.

Brooke's Point, Palawan

Dear Dr. Soriano,

Greetings!

The undersigned is taking up her Doctor of Philosophy in Nursing at the Philippine Women's University. The undersign would like to ask permission to allow her to conduct her study entitled "**Competency Profiles of Nurses in Palawan: A Basis for Sector-Wide Human Resource Planning and Support**", in your office.

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Thank you and more power.

Very Truly yours,

(Sgd.) ROY ALBERT N. ACOSTA

Researcher

May 27, 2025

NARCISO B. LEONCIO, MD

Leoncio General Hospital

Brooke's Point, Palawan

Dear Dr. Leoncio,

Greetings!

The undersigned is taking up her Doctor of Philosophy in Nursing at the Philippine Women's University. The undersign would like to ask permission to allow her to conduct her study entitled "**Competency**

Navigating Workforce Needs: A Comprehensive Analysis of Nurse Competencies in Palawan

Profiles of Nurses in Palawan: A Basis for Sector-Wide Human Resource Planning and Support", in your office.

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Thank you and more power.

Very Truly yours,

(Sgd.) ROY ALBERT N. ACOSTA
Researcher

May 29, 2025

BIMBO T. ALMONTE, MD
Medical Director, RTN Foundation Inc. Hospital
Bataraza, Palawan

Dear Dr. Almonte,

Greetings!

The undersigned is taking up her Doctor of Philosophy in Nursing at the Philippine Women's University. The undersign would like to ask permission to allow her to conduct her study entitled "**Competency Profiles of Nurses in Palawan: A Basis for Sector-Wide Human Resource Planning and Support**", in your office.

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Very Truly yours,

(Sgd.) ROY ALBERT N. ACOSTA
Researcher

Navigating Workforce Needs: A Comprehensive Analysis of Nurse Competencies in Palawan

May 28, 2025

RAUL C. SAGRADO, MD, DPBS., MMHoA

Chief, Sagrado Hospital Incorporated

Brooke's Point, Palawan

Dear Dr. Sagrado,

Greetings!

The undersigned is taking up her Doctor of Philosophy in Nursing at the Philippine Women's University. The undersign would like to ask permission to allow her to conduct her study entitled "**Competency Profiles of Nurses in Palawan: A Basis for Sector-Wide Human Resource Planning and Support**", in your office.

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Thank you and more power.

Very Truly yours,

(Sgd.) ROY ALBERT N. ACOSTA

Researcher

June 10, 2025

LAFAYETTE A. LIM

President & CEO

NCC Group of Companies

Lacao Street, Puerto Princesa City, Palawan

Dear Mr. Lim,

Greetings!

The undersigned is taking up her Doctor of Philosophy in Nursing at the Philippine Women's University. The undersign would like to ask permission to allow her to conduct her study entitled "**Competency Profiles of Nurses in Palawan: A Basis for Sector-Wide Human Resource Planning and Support**", in your office.

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Navigating Workforce Needs: A Comprehensive Analysis of Nurse Competencies in Palawan

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Thank you and more power.

Very Truly yours,

(Sgd.) ROY ALBERT N. ACOSTA
Researcher

June 10, 2025

MELODY ANGELA PALANCA
General Manager, Robinson's Place Palawan
North National Highway, Bgy. San Manuel,
Puerto Princesa City, Palawan

Dear Dr. Ruiz,

Greetings!

The undersigned is taking up her Doctor of Philosophy in Nursing at the Philippine Women's University. The undersign would like to ask permission to allow her to conduct her study entitled "**Competency Profiles of Nurses in Palawan: A Basis for Sector-Wide Human Resource Planning and Support**", in your office.

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Thank you and more power.

Very Truly yours,

(Sgd.) ROY ALBERT N. ACOSTA
Researcher

June 11, 2025

STEVEN TAN
General Manager
SM malls

Dear Mr. Tan,

Greetings!

Navigating Workforce Needs: A Comprehensive Analysis of Nurse Competencies in Palawan

The undersigned is taking up her Doctor of Philosophy in Nursing at the Philippine Women's University. The undersign would like to ask permission to allow her to conduct her study entitled "**Competency Profiles of Nurses in Palawan: A Basis for Sector-Wide Human Resource Planning and Support**", in your office.

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Very Truly yours,

(Sgd.) **ROY ALBERT N. ACOSTA**
Researcher

APPENDICES C

INFORMED CONSENT FORM

GRADUATE SCHOOL OF NURSING

You are being invited to take part in a research study entitled: "**Competency Profiles of Nurses in Palawan: A Basis for Sector-Wide Human Resource Planning and Support.**" This study is being conducted by **Roy Albert N. Acosta, a PhD Nursing student at Philippine Women's University**, in partial fulfillment of the requirements for graduation.

The purpose of the study is to examine the **competencies and needs of Palaweno nurses and their implications for nursing education administration and workforce planning in Palawan.**

Procedures: If you agree, you will be asked to participate in an **interview** that may include questions about your professional background, experiences, and perspectives as a nurse. With your consent, the session may be audio-recorded or video-recorded. **No invasive procedures** will be involved. Your expected participation will last approximately **30–60 minutes**. The study will involve **around 150 participants** across Palawan. This study is **non-experimental** and does not include randomization, clinical treatments, or placebo use.

Responsibilities: As a participant, you are expected to provide truthful and thoughtful responses during the interview.

Risks: There are **no anticipated physical risks**, but there may be minimal **social, psychological, or emotional risks**, such as discomfort in answering certain questions. Safeguards are in place to minimize these risks, including the option to skip any question or stop at any time.

Benefits: While there may be **no direct personal benefit** to you, your participation will contribute to a better understanding of the nursing workforce in Palawan. The findings may guide **policy improvements, workforce planning, and nursing education reforms** that could benefit the wider community and healthcare sector.

Navigating Workforce Needs: A Comprehensive Analysis of Nurse Competencies in Palawan

This study does not involve providing access to post-study products or interventions since it does not test a medical treatment. Likewise, there are **no alternative treatments** applicable, as this is not a clinical trial.

Compensation & Costs: You will not receive monetary compensation or material benefits for participating in this study. There are also **no anticipated expenses** for you during participation. In the unlikely event of a study-related injury, you will receive appropriate referrals and support in line with institutional policies, though no study-related insurance or financial compensation is available.

Voluntary Participation: Participation in this study is entirely **voluntary**, and you may withdraw at any time without penalty or loss of benefits to which you are entitled.

Confidentiality: Your identity will remain **confidential**. Data will be coded with unique identifiers rather than names. Records will be stored securely and accessed only by the researcher and authorized personnel. Study monitors, auditors, and the PWU-ERB may review records only for verification of procedures. To the extent permitted by law, your personal data will not be made publicly available, and your identity will not be disclosed in publications.

This study does not involve genetic testing or collection of biological specimens.

Ongoing Information: If new information arises during the study that may affect your willingness to continue, you will be informed promptly. At the end of the study, you will have access to a **summary of findings** if you wish. You also have the right to request access to your data, within the limitations of ethical and legal guidelines.

Termination of Participation: Your participation may be discontinued if you choose to withdraw, if circumstances make it impossible to continue, or if the study is terminated for ethical or scientific reasons.

Investigator Role: The principal investigator is acting solely as a researcher, not as a healthcare provider in this context.

Contact Information:

For further questions, clarifications, or in case of any concerns during the study, you may contact:

Roy Albert N. Acosta (Principal Investigator)

Email: royalbert.acosta@email.com

Mobile: +63 917 000 0000

For concerns about your rights as a participant or in case of grievances, you may contact:

PWU Ethics Review Board

Philippine Women's University – City of Manila

[Insert contact information]

CONSENT STATEMENT

I have read and understood the information above. The study has been explained to me, and I have had the opportunity to ask questions. I voluntarily agree to participate in this research project, with the understanding that I may withdraw at any time without penalty.

Participant

Signature

Date

Navigating Workforce Needs: A Comprehensive Analysis of Nurse Competencies in Palawan

Principal Investigator

Signature

Date

APPENDIX D

SURVEY INSTRUMENT

Dear Respondents:

You are an important part of a study about **“Competency Profiles of Nurses in Palawan: A Basis for Sector-Wide Human Resource Planning and Support.”** this study is conducted by **ROY ALBERT N. ACOSTA** for the degree **Doctor of Philosophy in Nursing at the Philippine Womens University - Main Campus, Taft Avenue, City of Manila.**

Please answer the following questions. All individual information will be kept confidential.

Thank you very much for your cooperation.

PART I: DEMOGRAPHIC PROFILE

Objective: To describe the background characteristics of Palaweno nurses, including their employment roles, socio-demographic attributes, and professional experience.

Instruction:

Please select or write in the option that best describes you for each of the following items.

1. **Employment Role**

- ☐ Staff Nurse
- ☐ Supervisor
- ☐ Department Head
- ☐ Manager
- ☐ Academic Faculty
- ☐ Other (please specify): _____

2. **Age**

- ☐ 18–24
- ☐ 25–34
- ☐ 35–44
- ☐ 45–54
- ☐ 55 and above

3. **Gender**

- ☐ Female
- ☐ Male

4. **Civil Status**

- ☐ Single
- ☐ Married
- ☐ Separated/Divorced
- ☐ Widowed

5. **Ethnicity**

- ☐ Tagbanua
- ☐ Palaw'an
- ☐ Cuyunon
- ☐ Cebuano
- ☐ Ilonggo
- ☐ Tagalog
- ☐ Visayan
- ☐ Other (please specify): _____

6. **Religion**

- ☐ Roman Catholic
- ☐ Protestant (e.g., Adventist, Methodist, Jehovah's Witnesses)
- ☐ Born-again Christian
- ☐ Iglesia ni Cristo
- ☐ Islam
- ☐ Other (please specify): _____

7. **Highest Educational Attainment**

- ☐ Bachelor of Science in Nursing (BSN)
- ☐ Master of Science in Nursing (MSN)
- ☐ Doctorate (PhD/DrPH)
- ☐ Post-Doctorate
- ☐ Diploma/Certificate in Nursing
- ☐ Other (please specify): _____

8. **Monthly Income** (Philippine Statistics Authority brackets)

- ☐ Less than ₱14,560
- ☐ ₱14,560 – ₱29,120
- ☐ ₱29,121 – ₱58,240
- ☐ ₱58,241 – ₱116,480
- ☐ ₱116,481 – ₱232,960
- ☐ ₱232,961 – ₱465,920
- ☐ Above ₱465,920

9. **Sectoral Affiliation**

- ☐ Government Hospital
- ☐ Private Hospital
- ☐ Academic Institution
- ☐ Private Company Healthcare Clinic
- ☐ Public Healthcare Clinic
- ☐ Others (please specify): _____

10. **Year of BSN Graduation**

- ☐ Before 2000
- ☐ 2000–2010
- ☐ 2011–2020
- ☐ 2021 onward

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11. Time Interval Between Graduation and First Employment

- Less than 6 months
- 6–12 months
- More than 12 months

12. Employment Status

- Regular/Permanent
- Contract of Service
- Job Order
- Part-time

13. Total Years of Professional Nursing Experience

- 0–5 years
- 6–10 years
- 11–15 years
- 16–20 years
- 21 years and above

14. Years of Experience in Public Health Nursing

- 0–5 years
- 6–10 years
- 11–15 years
- 16–20 years
- 21 years and above

PART II: SELF-RATED COMPETENCY INVENTORY FOR REGISTERED NURSES

Objective: To assess nurses' self-perceived competency levels across seven core domains of nursing practice (Clinical Care; Leadership; Interpersonal Relation; Legal/Ethical Practice; Professional Development; Teaching–Coaching; Critical Thinking/Research Aptitude).

Instruction:

“For each of the following statements, please indicate your level of competence by selecting one of the response options on the 5-point scale below:

0 = Lack of competence | 1 = Low competency | 2 = Limited competency | 3 = Sufficient competence | 4 = Very high competence

Item No.	Competency Statement	0	1	2	3	4
	Dimension 1 – Clinical Care					
2	Provides culturally-sensitive care					
3	Detects and documents significant changes in a patient's condition					

5	Gives emotional support to families					
9	Assesses all health dimensions of the client (physical, psycho-social, spiritual)					
12	Develops a nursing care plan for a specific patient based on primary and secondary data					
16	Delivers accurate, comprehensive, and effective nursing interventions in accordance with the plan					
21	Involves the patient and family in the planning and implementation of care					
26	Utilizes technological advances to improve nursing and health care					
29	Identifies and includes immediate patient needs in the nursing care plan					
40	Evaluates the results of nursing care interventions					
	Dimension 2 – Leadership					
13	Identifies and understands others' personal strengths and weaknesses					
15	Coordinates the relation between nurses and all related personnel					
30	Recognizes others' contributions and achievements					
34	Accepts and uses constructive criticism					
35	Delegates responsibility for care based on					

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	assessment of individuals' abilities					
38	Gets group approval on important matters before acting					
41	Acts to develop an atmosphere for teamwork and cooperation					
45	Promotes cooperation, trust, and open exchange of ideas					
51	Resolves conflict in a positive way					
	Dimension 3 – Interpersonal Relation					
4	Expresses facts and thoughts in writing in a clear and organized way					
19	Adjusts actions in relation to others' actions					
23	Expresses disagreements in a constructive manner					
24	Cooperates with other care providers to meet patient needs					
32	Communicates facts, ideas, and feelings to other health team members verbally					
36	Builds trust by keeping word, commitments, and promises					
37	Acknowledges differences in beliefs and cultural practices of individuals/groups					
57	Shows willingness to share workload when needed					
	Dimension 4 – Legal/Ethical Practice					
10	Carries out nursing practice according to legal requirements					

	and organizational policy					
11	Functions in accordance with legislative and common law affecting nursing practice					
27	Takes responsibility for one's own performance					
33	Serves as an advocate for the rights of clients or groups					
39	Respects the patient's/client's right to privacy					
46	Ensures confidentiality and security of written and verbal information acquired professionally					
47	Reports all perceived malpractice incidents to responsible persons					
52	Respects the patient's/client's right to choice and self-determination in care					
	Dimension 5 – Professional Development					
6	Understands the role of professional organizations and actively participates in them					
28	Demonstrates self-awareness of personal strengths and limitations					
31	Understands relevant and current information concerning the health care system					
55	Uses learning opportunities for ongoing personal					

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	and professional growth					
56	Recognizes own learning needs					
58	Displays self-direction in personal development					
	Dimension 6 – Teaching-Coaching					
8	Uses opportunities for patient teaching when they arise					
18	Initiates appropriate orientation programs for new nurses					
20	Takes up the preceptor role to support new nurses adapting to a new working environment					
43	Coaches junior nurses to meet both task needs and their developmental needs					
48	Identifies learning needs of others, including patients, families, and junior nurses					
42	Develops an explicit teaching strategy to teach patients and families					
	Dimension 7 – Critical Thinking/Research Uptitude					
1	Identifies priority risks in clinical situations					
7	Integrates pertinent data from multiple sources					
17	Uses different ways to search for information					
22	Figures out more than one way to solve confronting clinical problems					

44	Assists in clinical research data collection					
49	Makes decisions that reflect both knowledge of facts and sound judgment					
53	Incorporates relevant research findings into nursing practice					
54	Defends decisions using scientific knowledge and principles					

PART III: PERCEIVED INFLUENCING FACTORS

Objective: To identify and quantify how strongly nurses believe a range of individual-level, organizational/institutional, and sociocultural/systemic factors affect their competency.

Instruction:

Please indicate your level of agreement with each statement by selecting one of the response options on the 5-point scale below:

1 = Strongly Disagree | 2 = Disagree | 3 = Neither Agree nor Disagree | 4 = Agree | 5 = Strongly Agree

Item No.	Statement	1	2	3	4	5
	Individual-Level Factors					
1	My age influences my competency as a nurse.					
2	My gender influences how competent I feel.					
3	My years of professional experience affect my competency.					
4	My educational attainment influences my competency.					
5	My licensure and additional					

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	certifications enhance my competency.					
6	My self-efficacy (confidence in my abilities) affects my competency.					
7	My motivation and job satisfaction influence my competency.					
8	Participation in continuing professional development improves my competency.					
	Organizational/Institutional Factors					
9	Access to professional development opportunities influences my competency.					
10	Supervision and mentorship affect my competency.					
11	The culture of my workplace influences my competency.					
12	Availability of resources (staff, equipment, supplies) affects my competency.					
13	Recognition and rewards for good performance influence my competency.					
14	The nurse-to-patient ratio affects how competent I can be.					
15	Staffing policies (rotations, assignments) influence my competency.					
16	Internal performance evaluations and feedback affect my competency.					
	Sociocultural & Systemic Factors					
17	Community expectations influence my competency.					
18	Healthcare system challenges (bureaucracy, policy)					

	changes) affect my competency.					
19	Stigma or institutional hierarchies influence my competency.					
20	Support from local governance and leadership affects my competency.					
21	My geographical work setting (urban vs. rural) influences my competency.					

Thank you very much for your participation!

APPENDIX E

CURRICULUM VITAE



ROY ALBERT NOLASCO ACOSTA, Ph.D.
 F. Rafols Street, Sta. Monica, Puerto Princesa City
 5300, Palawan, Philippines
 Telephone Number: +639759884104
 Email Address: raacosta@psu.palawan.edu.ph

PERSONAL DATA:

Date of birth: August 07, 1982 **Civil status:** Single
Place of birth: El Nido 5313, Palawan
Height & weight: 5'7" / 145 lbs
Age & Gender: 30 years old / Male
Nationality & Religion: Filipino/Christian

EDUCATIONAL BACKGROUND:

Post-Graduate:
DOCTOR OF PHILOSOPHY IN NURSING (Acad. Completed)
 Philippine Women's University
 Taft Ave., Manila

DOCTOR OF PHILOSOPHY IN EDUCATIONAL ADMINISTRATION

Navigating Workforce Needs: A Comprehensive Analysis of Nurse Competencies in Palawan

Western Philippines University
(Graduated)
Puerto Princesa City Campus, Puerto
Princesa City 5300, Palawan, Philippines

Graduate Studies:

MASTER OF ARTS IN EDUCATION IN SCIENCE EDUCATION

University of Northern Philippines
(Graduated)
Vigan City, Ilocos Sur

MASTER IN EDUCATIONAL MANAGEMENT

Western Philippines University
(Graduated)
Puerto Princesa City Campus, Puerto
Princesa City, Palawan

MASTER OF ARTS IN NURSING

Philippine Christian University
(Graduated)
Main Campus, Taft Avenue, Manila

Tertiary:

BACHELOR OF SCIENCE IN NURSING

Holy Trinity University
Puerto Princesa City, Palawan
RANK IN CLASS: 5th Place
AWARDS RECEIVE: Departmental &
Community Service Award

CERTIFICATE IN TEACHING PROGRAM

(18 Units Teacher Certification
Program)

Western Philippines University - Puerto
Princesa City, Palawan

Secondary: EI NIDO NATIONAL HIGH SCHOOL

El Nido, Palawan

Elementary: SIBALTAN ELEMENTARY SCHOOL

Sibaltan, El Nido,
Palawan

Honorable mention

Award Receive: 1st

PROFESSIONAL LICENSE:

REGISTERED PROFESSIONAL TEACHER (LPT)

Major: Biological Science
Professional Regulation Commission

REGISTERED NURSE (RN)

Professional Regulation Commission

REGISTERED MIDWIFE (RM)

Professional Regulation Commission

PROFESSIONAL MEMBERSHIPS:

PHILIPPINE ASSOCIATION OF SCIENCE EDUCATORS OF THE PHILIPPINES

Regular Member

PHILLIPINE NURSES ASSOCIATION (PNA)

Regular Member

INTEGRATED MIDWIVES ASSOCIATION OF THE PHILIPPINES (IMAP)

Regular Member

WORK EXPERIENCES:

UNIVERSITY INSTRUCTOR III

Palawan State University – Graduate School -
Graduate Nursing - August 1, 2022 to Date.

UNIVERSITY INSTRUCTOR I

Palawan State University – Graduate School -
Graduate Nursing - August 1, 2022 to Date.

SECONDARY SCHOOL TEACHER 3

Department of Education - Puerto Princesa City
Division / June, 6, 2016 to date.

SECONDARY SCHOOL TEACHER 1

Department of Education - Puerto Princesa City
Division / July 22, 2015 to June, 5, 2016.

UNIVERSITY LECTURER

Palawan State University – College of Nursing and
Health Sciences / April 3, 2013 to June 10, 2013.

INSTRUCTOR III (Contract of Service)

Palawan State University – College of Nursing and
Health Sciences / October 20, 2007 to March 30,
2012.

BOOK CO-AUTHORSHIP

Navigating Workforce Needs: A Comprehensive Analysis of Nurse Competencies in Palawan

- Inquiries, Investigations and Immersion, Beyond Books Publication, Published 2020.

-General Biology 2, Beyond Books Publication, Published 2021.

- Maternal and Child Health Nursing, Beyond Books Publication, Published, 2024

RESEARCH PRESENTATIONS:

International Seminar-workshop on Action Research and Classroom Management, January 31-February 2, 2020 @ A and A Plaza Hotel.

International Seminar-workshop on Education and Research, September 3-7, 2019 @ Vanyard Eco Hotel, Puerto Princesa City.

4th National Conference on Sustainable Development and 5th Palawan Research Symposium with the theme: “Sustaining the future: the hindsight, insight and foresight of science, research and innovations, July 26-27, 2018, City-state Asturias Hotel.

Western Philippines University Research and Extension Forum, February 28, 2017, Training Center, Western Philippines University.

3rd National Conference on Sustainable Development and 4th Palawan Research Symposium with the theme: “Conserving Biodiversity, Promoting Green Growth and Sustaining Inclusive development based on Science”, July 27-28, 2017, City-state Asturias Hotel.

INTERNATIONAL RESEARCH PUBLICATION:

1. International Research Journal of Multidisciplinary Scope (IRJMS)

Title: Uncovering Caring Elements within Short Encounter among Emergency Room (E.R.) Staff Nurses at Hospitals in Lanao Del Sur: An Explanatory Sequential Study

Author(s): Ashley Norren Ni-Imah U Sarip, Hamdoni K Pangandaman*, Namera T Datumanong, Mohammad Ryan L Diamla, Romanoff M Raki-in, Magna Anissa A Hayudini, Alijandrina T Jalilul, Baby Jane K Wahab, Aldrin M Jikirani, Roy Albert N Acosta, Nurhaliza N Pingay

Volume: 6 Issue: 2 Pages: 1470-1479

DOI:

<https://doi.org/10.47857/irjms.2025.v06i02.03861>

2. Journal of Educational Research in Developing Areas (JEREDA)

Title: Development and validation of grade 10 science learning materials in selected secondary schools in district III, division of Puerto Princesa city, Philippines

Author(s): Roy Albert N Acosta

Volume: Vol. 1. Issue 3, Pp. 248-264, 2020

DOI: <https://doi.org/10.47434/JEREDA>.

eISSN: 2735-9107

SEMINARS ATTENDED:

Training on Utilization of Descriptive and Inferential Statistics in Research, April 29 to May 1, 2019 @ A and A Plaza Hotel.

Pueblo Science International Training: Empowering teachers to equip the next generation of innovation, May 21-23, 2019 @ Holy Trinity University.

Teenage Pregnancy Symposium, Sponsored by the City Government of Puerto Princesa, November 28, 2019, Bgy. Sta. Monica, Puerto Princesa City.

5th STRASUC for Culture and the Arts Festival with the theme: Celebrating Diversity of Cultural Expression, November 11-14, 2019, Western Philippines University.

Competency – Based Classroom Management Seminar – Workshop, November 15-17, 2019, Divine Grace Institute.

International Conference in Science Education with the theme: “Revitalizing, Reinvigorating, and strengthening science instruction through inquiry- based science education”, May 3-5, 2017, Skylight convention center, Puerto Princesa City.

CHARACTER REFERENCES:

Elsa P. Manarpaac, Ph.D

Professor-Post Graduate Studies

Western Philippines University

Contact Number: 09213769389

Contact Number: 09205596862

Franklin Joseph D. Solita, Ed.D

Professor-Post Graduate Studies

Navigating Workforce Needs: A Comprehensive Analysis of Nurse Competencies in Palawan

Western Philippines University

Contact Number: 09103793001

I hereby certify that the above information
is true and correct.

A handwritten signature in black ink, appearing to read 'ROY ALBERT N. ACOSTA', with a long horizontal stroke extending to the right.

ROY ALBERT N. ACOSTA, Ph.DEA
Candidate