Learning Culture in the Perspective of the Successful of Indonesian Nurse Competency Examination

by Profesi Ners

Submission date: 21-May-2024 02:54PM (UTC+0900)
Submission ID: 2381117799
File name: naskah_IJNP_submit.docx (198.78K)
Word count: 7035
Character count: 41601

Learning Culture in the Perspective of the Successful of Indonesian Nurse Competency Examination

[1]Syaifurrahman Hidayat, [2]Mujib Hannan, [3]Nailiy Huzaimah, [4]Emdat Suprayitno, [5]Elyk Dwi Mumpuningtias, [6]Prestasianita Putri , [7]Agnes Erida Wijayanti, [8]Adão Manuel da Silva

[1,3,4,5] Faculty of Health Science, Wiraraja University, Indonesia
[6] Faculty of Health Science, dr. Soebandi University, Indonesia
[7] School of Health Wira Husada Yogyakarta, Indonesia
[8] Faculty of Health Science, Instituto Superior Cristal, Timur Leste

Correspondding author: dayat.fik@wiraraja.ac.id

Abstract

Introduction: The Indonesian Nurse Competency Examination (INCE) is a strategic component that determines the output of nursing graduate students. The learning culture of archipelago students is unique and generally carries over to higher education, notably nursing profession education. Method: A qualitative and quantitative combination research (mixed method) with a sequential exploratory design. Stage 1 used descriptive qualitative methods. Data collecting used structured interviews. The sampling technique used snowball with (n=9) and data analysis using Sandelowski content analysis. Stage 2 was an observational analytical design with a retrospective approach involving 74 nursing students at Wiraraja University who lived in the archipelago area. Data analysis used the Structural Equation Model (SEM) test to find variables that significantly influence the success of INCE. Results: Stage-1 produced three themes: Theme-1: background of the learning environment concerning facilities utilization and searching strategy for learning resources; Theme-2: learning activities including learning styles, learning motivation, and self-confidence and abilities; Theme-3: learning habits including learning methods, concentration, repeating the learning material. In stage 2, the result was that learning environment background (p=0.031), learning activities (p=0.021), and study habits (p=0.028) were significantly related to the success of the INCE on archipelago students. Conclusion: The learning culture of archipelago students from the perspective of success in the INCE is formed starting from the pre-graduate level and continuing at the higher and professional levels.

Keywords: learning culture, nurse competency examination, undergraduate student, archipelago student.

Introduction

The manuscript is written with Calibri font size 11, single-spaced, left and right The Indonesian Nurse Competency Examination (INCE) is a referen in determining standards for nurse skill competencies in Indonesia. Minister of Education and Culture Regulation Number 2 of

2020 stated that the exit-exam system obliges nursing students to pass the competency assessment through 60% for academic score and 40% of the INCE score for requisite (Waliulu & Rumakey, 2022). Competency tests are the basis for determining standards for providing registration and licenses to nursing practices in delivering health services. Efforts to provide health services with patient safety principles are the goal in determining competency standardization so that nurses can provide comprehensive nursing services (Kemenristek Dikti, 2016). Completing professional education reflects the future nurse's role with professional skills to serve a secure and high-quality nursing process (Forsman et al., 2020). However, the number of passing INCE is still a problem in Indonesia because the graduation rate still needs to be higher.

The number of students passing the exam gives high scores in the institution's accreditation assessment (Serembus, 2016). The exit exam policy, implemented in 2021, is an acceleration strategy to produce nurse graduates ready to be employed in the workforce, ensuring that graduates have adequate knowledge, skills, and behavior or have reached minimum standards. Data from the Ministry of Research and Technology in 2019 states that nursing students who have not received a competent designation are still in the high range, which has an impact on not being issued a registration certificate, which is a requirement for providing a license for nursing practice (Kemenristek Dikti, 2016). Many nursing program students still take the National Nursing Competency Assessment (INCE) and must meet competency standards. As a result, they do not obtain a license to be able to practice nursing (Naafi'a, Efendi, & Wahyuni, 2020).

Based on data from the Quality Assurance Directorate, the current phenomenon found that the competency assessment participants that graduate still need to be higher, and the graduation percentage from 2016 to 2019 has decreased. This condition results in an accumulation of students with crack status that accumulates every year (Syapitri & Hutajulu, 2020). According to Indonesian Ministry of Research and Technology for Higher Education statistics for the last three years, in 2018, 46,570 participants participated in INCE. Of this number, 26,208 people successfully passed (56.28%), while 20,362 participants (43.72%) failed. In 2019, the number of participants increased to 50,911, with 29,240 participants passing (57.43%) and 21,671 (42.57%) failing. However, in 2020, the implementation of INCE period XVI was postponed in July due to Covid-19. The number of participants in 2021 was 16,363, and the graduation rate decreased, with 7,335 participants successfully passing (44.83%) and 9,028 participants (55.17%) failing

(Palingrungi, Kadar, & Sjattar, 2021).

Previous research found that mental readiness, self-readiness, learning readiness, ability to fully understand science and other external factors were significantly related to passing the INCE (Lestari, Tahir, & Sjattar, 2023). The cultural context of learning is quite interesting to discuss regarding its influence on the success of INCE. The learning culture from the perspective of the success of INCE Nurses among archipelago students is unique to be discussed referring to INCE's achievements, which have yet to reach the target, and the high level of human resources for nursing students in the archipelago area.

This situation is similar to the competency assessment process for nurses currently enforced in Indonesia. There are several aspects that impact the percentage of competent status in the competency assessment. Aspects that notably affect students' capability to pass the competency tests include individual, academic, and cognitive factors (Sears, Othman, & Mahoney, 2015). There are several factors that influence the success of competency assessment from the perspective of student learning preparation, including motivation, reading skills, note-taking, time management, and critical thinking abilities (Farrell, Peters, & Rourke, 2010).

The large number of incompetent nursing students in INCE has decreased the number of qualified nursing graduates. This situation affects the healthcare sector in terms of reducing the availability of nurses. This condition causes a shortage of nursing staff that is difficult to fulfill and results in a nursing shortage. The World Health Organization in 2016 appraised that there would be a shortage of 7.6 million nursing personnel worldwide in 2030 (Haas, Swan, & Jessie, 2020). More competent personnel in the health sector will benefit individuals and communities who need to access health services and can help achieve Sustainable Development Goals (SDGs) (Naafi'a et al., 2020).

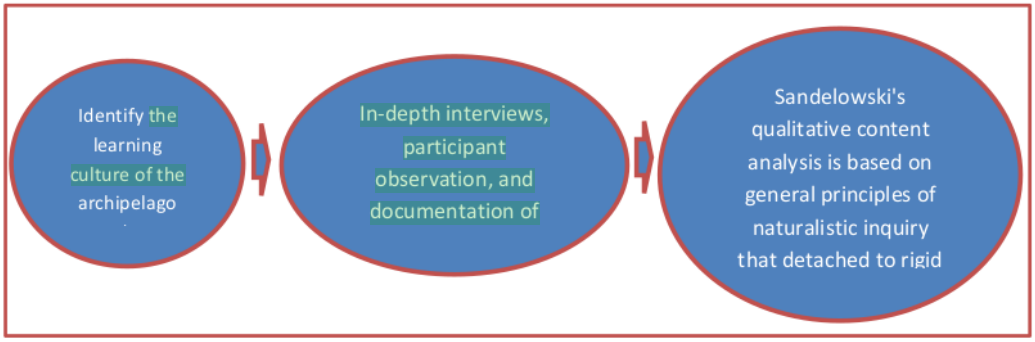
The success of INCE from the perspective of student learning preparation involves factors such as motivation, reading skills, note-taking, time management, and the ability to critique competency test material (Farrell et al., 2010). The nursing competency assessment results focused in the USA, such as the NCLEX, emphasize student guidance, anxiety management, and creating strategies for exam improvement programs. In addition, success in the NCLEX also depends on the contributions of students, teachers, and institutions, usually expressed in three nominal terms (Hyland, 2012).

Students learning culture from the archipelagos have unique

characteristics in their learning approach. Sumenep Regency has 126 islands spread out and 48 unpopulated, which is a unique area (Hidayat, Arief, & Efendi, 2023). The environmental conditions, activities, and study habits of students from this region face several significant challenges due to the region's geographical location (Hidayat, Arief, Effendi, Hannan, & Huzaimah, 2023). Habits formed in the learning process are not genetic or hereditary but are created through the learning process by individuals in their social environment. Therefore, this research objective was to qualitatively portray the learning culture of archipelago students, especially in the context of success in the nurse competency test. This research identifies various problems and assumes that one of the factors that may be the cause of success in nursing competency assessment is the student learning culture, both before and during higher education.

Methods

This research combined qualitative and quantitative research (mixed method) by a sequential exploratory design. Sequential explanatory means that this research begins with qualitative research and then quantitative research (Creswell, 2016). Phase I of this research applies a qualitative approach with a descriptive research design. Descriptive qualitative research explains the theme of learning culture, which is the background of a phenomenon in students related to the health sector (Moleong, 2013). This qualitative descriptive research was carried out to describe and explain the problems being researched in depth. This research focuses on a more detailed understanding of an individual, group, or situation. The qualitative research design is arranged as follows:



Picture 1. The design of qualitative research

Phase 1 of the research was in the nursing professional study program, which was carried out from May to December 2023. Participants in this research were nursing professional students from the islands of Madura, and nursing lecturers at the Faculty of Health Sciences. This research used a non-probability sampling method: snowball sampling. It is a sampling technique where the sample size is initially small, then grows over time (Sugiyono, 2013). The snowball sampling technique was used in this research, because it was considered the appropriate method for determining the sample. The initial step taken in carrying out this research is to determine one or two participants as key participants, however, if the data obtained is considered incomplete then the researcher anticipated other people to complete the data until the data from the participants is complete.

Phase 1 of the research was in the nursing professional study program from May to December 2023. Participants in this research were professional nursing students from the islands of Madura and nursing lecturers at the Faculty of Health Sciences. This research used a non-probability sampling method: snowball sampling. It is a sampling technique where the sample size is small and then grows over time [16]. The snowball sampling technique was used in this research because it was considered the appropriate method for determining the Sample. The initial step taken in carrying out this research is to select one or two participants as key participants; however, if the data obtained is considered incomplete, then the researcher anticipated other people to complete the data until the data from the participants is complete.

Participants include students and lecturers. Participants are active students from the nursing profession at the Faculty of Health Sciences, Wiraraja University who meet the inclusion criteria: Active students in the 2022/2023 academic year, have never taken academic leave, come from the islands of Madura, while the exclusion criteria are students who have dropped out. A Nursing Lecturer is an active educational staff member in the Nursing Study Program Faculty of Health Sciences, Wiraraja University, with the inclusion criteria: Lecturer with a minimum master's degree, more than five years of teaching experience, and experience as a clinical supervisor for

nursing students. Meanwhile, the exclusion criteria include lecturers on study assignments/permits and non-permanent lecturers.

Data collection began with in-depth interviews using research tools like interview guides, observation sheets, recording equipment, and cameras. Research data was analyzed using a qualitative content analysis approach. Next, data validity tests were carried out, including credibility (internal validity), dependability (reliability), transferability (external validity), and confirmability (objectivity). In this research, triangulation of methods and sources was carried out. The results of Phase I research were continued with the preparation of a quantitative questionnaire in accordance with the qualitative data results.

The next stage, stage 2 research, involves collecting quantitative data. All nursing professional students of the Faculty of Health Science, Wiraraja University were the population in this study. The Sample was determined purposively, with inclusion criteria as in Phase I research and additional criteria, namely having passed the INCE (n=74). Data collection was carried out using a learning culture questionnaire, which consisted of Learning environment background, learning activities, learning habits, and the success of the INCE. The learning environment background questionnaire includes the use of learning facilities and the search strategy for learning resources at the senior high school level, consisting of 12 statement items. The learning activity questionnaire consists of the Kolb Learning Style Inventory, which consists of 22 question items, and learning motivation (8 items), self-confidence (3 items), and self-ability (8 items) questionnaire in facing the Competency Assessment. The third questionnaire is a study habits questionnaire, which consists of a study methods questionnaire (14 items), concentration (4 items), repeating learning material (4 items), and discussing with friends (3 items). Meanwhile, success in the Competency Assessment is divided into two criteria, namely, first taker and retaker. Quantitative data analysis uses the Structural Equation Model (SEM). This analysis explains the overall relationship among variables in the research. The SEM test results will determine the loading, cross-loading, and composite reliability factors.

Results

The richness of this research lies in the diversity of the actors involved. The survey made it possible to question 13 different profiles of nursing students (Table 1). In this perspective, 200 undergraduate nursing students come from different age groups that range from 18 to 26 years old. Thus, the predominant age category was between 21-23, which represents almost half (43.5%) of all participants. Moreover, it is the female sex that predominates with a percentage of 63% of participants.

Phase 1 research

Participant Characteristics

Participants in this research are archipelago nursing students and Nursing Lecturer of the Faculty of Health Sciences, Wiraraja University, in the academic year 2022/2023. The participant's characteristics in this study are demonstrated in Table 1.

Table 1. The participant's characteristics (n= 9)

No	Participant's code	Criteria	Initial	Sex	Age	Education level
1	NS01	Student	"AK"	L	24	Bachelor's degree
2	NS02	Student	"NA"	L	28	Bachelor's degree
3	NS03	Student	"FL"	L	25	Bachelor's degree
4	NS04	Student	"RZ"	L	27	Bachelor's degree
5	NS05	Student	"SH"	L	25	Bachelor's degree
6	NS06	Student	"AN"	P	23	Bachelor's degree
7	DS07	Lecture	"HS"	P	36	Master's degree
8	DS08	Lecture	"DI"	P	39	Master's degree
9	DS09	Lecture	"WH"	L	41	Master's degree

Table 1 shows that 9 participants in this first Phase of research, consisting of 7 nursing students from the archipelago, with the highest age being 28 years and the lowest age being 23 years, three nursing lecturers who are active and active as teaching staff at the Faculty of Health Sciences, Wiraraja University.

Research themes

Theme 1: The learning environment background

This theme provides an overview of the elements of learning culture in the form of 1). Facilities utilization, and 2). Search strategy for learning resources

Sub Theme 1.1: The Facilities Utilization

Based on in-depth interview results, the learning environment background based on learning facilities are as follows:

> "There is lighting; it's just on a rotational basis (electricity blackout) ... from the four districts, every two districts take turns turning the electricity power on and off" (NS01).
> "There's no phone signal, so it's just cell phones. And there is no internet connection, so we usually use the telephone, so we use books to study" (NS02).
> "Thank God I bought a laptop; everything is fulfilled, but learning about the internet is difficult" (NS06).

The archipelago students stated that they needed help using internet access, and laptop facilities were rare; using facilities for learning was not practical for archipelago students.

Sub Theme 1.2: Strategy for finding learning resources

The following are statements from archipelago students regarding the search for resources in daily study on the island.

> "..... no sir, because the signal is not good here" (NS06).
> "There is no library; when I have the task of looking for references, there is no one" (NS04).

The geographic condition of the islands has limited facilities, internet access, and inadequate facilities, which will impact the need for more learning facilities for students. The results of interviews with participants found they mainly stated that it was difficult to find references for learning materials except for books that had been provided or existed previously.

Theme 2: Learning activity

This theme provides an overview of the cultural learning activities of island students in the form of 1). Learning style, 2). Learning motivation, 3). Self-confidence and 4). Self-ability

Sub Theme 2.1: Learning style

The results of in-depth interviews state that archipelago students' daily learning activities based on learning styles are as follows:

"Conditioning, sir, when I study to increase my insight, I usually study alone, sir, if I need other people's opinions, then I discuss or share with a group" (NS01).
"I prefer studying in groups because I can share" (NS06).

Most nursing students from island areas stated that they preferred studying in groups by discussing, listening, and exchanging opinions.

Sub Theme 2.2: Motivation to learn

The results of in-depth interviews regarding archipelago students' daily learning activities based on learning motivation are as follows:

"I am very supported by my family, with facilities such as a laptop, cellphone, pocket money" (NS03).
"I was more diligent in studying when I was in the profession because I was practicing while I was doing it" (NS05).

The motivation to study for nursing students from the islands received a lot of support from their families and parents, both moral and material support; students also stated that some of them were more motivated to study during their professional nursing education because the students learned while practicing patient care directly in the practice area.

Sub Theme 2.3: Confidence

The results of the in-depth interviews stated the students' self-confidence in answering the nurse competency test questions as follows:

"I answered rather calmly because I diligently studied using SINERSI, and the INCE questions were easier than the SINERSI I studied" (NS06).
"At first, I had mixed feelings, stressed, confused because I was afraid I wouldn't pass, but when I answered the INCE questions, I was more optimistic because I had prepared beforehand" (NS05).

Nursing students who come from the islands feel they have strong self-confidence when answering the Nurse Competency Test questions, because they already have the capital to study diligently beforehand, so they are optimistic that they can answer the Competency Test questions.

Sub Theme 2.4: Self-ability

The results of in-depth interviews regarding students' abilities in answering nurse competency test questions are as follows:

> "I learned to use scamming and scanning techniques. So, I read the main question and looked for the answer, sir. "It can automatically answer; sometimes there are cheating questions like that, sir, so just be sure, and I will be able to answer" (NS01).
>
> "They could answer the INCE questions because they had mastered the practice of SINERSI questions" (DS09).

The nursing student's ability to answer INCE questions needs good preparation, including taking part in tutoring on questions, competency test tryouts, and INCE readiness seminars.

Tema 3: Study habits

This theme provides an overview of the study habits of archipelago students in the form of 1). Learning methods, 2). Study concentration, 3). Repeat learning material

Sub Tema 3.1: Study method

> "I study using online methods through SINERSI, and YouTube. I use all of them, while offline, I study INCE question books, competency test seminars, and national and local INCE tryouts" (NS05).
>
> "Learning methods for INCE preparation for nursing students are INCE preparation seminars, online learning using SINERSI, which is facilitated through AIPNI, national and local tryouts, and study guidance that we provide to students" (DS08).

The study method for archipelago nursing students as a preparation effort for the national Competency Assessment is through four learning stages, including 1). Participate in a seminar on tips for success in taking the competency test, which presenters from East Java Province fill. 2). Online learning through the SINERSI Application from Association of Indonesian Nurse Education Center (AINEC), 3). National and local INCE Tryout 4). Group study tutoring facilitated by lecturers from Faculty of Health Sciences, Wiraraja University.

Sub Theme 3.2: Study Concentration

The results of in-depth interviews stated that students' learning concentration in answering nurse competency test questions was as follows:

"I study more at night; in the morning, I practice at the hospital and vice versa" (NS05).

"I concentrate more on studying INCE questions while studying at the clinic" (NS05).

The results of interviews with nursing students found that most students concentrated more on studying while applying cases to patients by practicing in the hospital.

Sub Theme 3.3: Repeat learning material

The results of in-depth interviews stated how to repeat learning materials in studying nurse competency test questions as follows:

"Repeated, like the questions that were given yesterday are repeated" (DS08)

"I study by repeating from 1 question to 20, read again, read after morning prayers, and in the morning, I was ready to go to practice" (NS05)

Nursing students use the method of studying nursing student competency test questions by repeatedly studying the questions until the students understand the flow of the questions and the meaning of each answer choice. So that students become optimistic in preparation for the Competency test.

Phase 2 research

This second research stage was carried out using quantitative methods on several nursing students from the Faculty of Health Sciences, Wiraraja University, for the 2022/2023 academic year (n=74) who had passed the Nurse competency test. The participants' characteristics, as demonstrated in Table 2.

Table 2. The characteristics of the participants (n= 74)

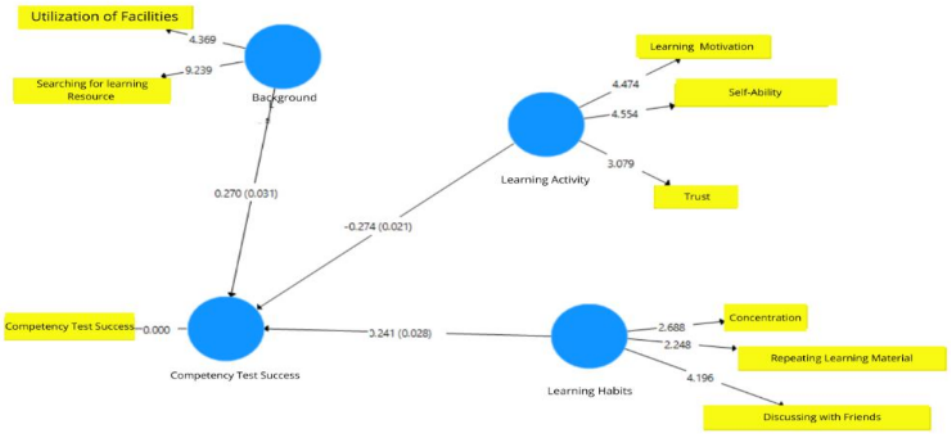
Demographic data	N	Percentage (%)
Sex		
Man	24	48
Woman	50	52
Age (year)		
Late adolescent (17 - 25)	47	64
Early Adult (26 - 35)	16	22
Late Adult (36 - 45)	9	12

Demographic data	N	Percentage (%)
Early Older (46 - 55)	2	3
Educational status		
Senior high school	43	58
Diploma 3	31	42
Employment status		
Unemployed	35	47
Employed	39	53
Competency assessment graduate status		
Graduated First Taker	59	80
Graduated Retaker	15	20

The results of this research on participant characteristics (Table 2) show that the majority of participants were female (52%), were in their late teens (64%), had previous education in SMA/SMK/equivalent (58%), and had working status (53%). Most of INCE's graduation statuses were first takers (80%).

Based on SEM analysis, the output of the concurrent validity test found that three indicators had factor loading values below 0.5, namely learning styles and learning methods. These results showed that the learning style and learning methods indicators cannot justify the construct, so these two indicators are candidate factors to be discarded. The construct variable reliability test is then carried out until a reliable indicator is found.

The composite reliability results show that the indicator block that measures the construct variables of searching for learning resources, utilization of facilities, learning motivation, self-ability, self-confidence, concentration, repeating learning material, and discussing with friends obtained a value of > 0.6, so the construct variable was reliable.



Picture 2. T-value and p-value model fit.

The results of the significance test in the model analysis (Inner Model) were carried out on indicators that have been proven reliable, namely eight indicators (Figure 1). The T-Table value is >1.96, and the p-value is ≤0.05, indicating that these variables influence the success of INCE. The T-Table values for each factor that influences the success of INCE are searching for learning resources (9.239), utilization of facilities (4.369), motivation to learn (4.474), self-ability (4.554), self-confidence (3.079), concentration (2.688), repeating learning material (2,248), and discussing with friends (4,196). The results of the significance test showed that the three variables, learning environment background (p=0.031), learning activities (p=0.021), and study habits (0.028), significantly affect the success of INCE.

Discussions

The success of the INCE is influenced by various factors. This research discusses learning culture as a factor that influences the success of INCE. Qualitatively, three themes were obtained, including the use of internet services is closely related to the learning and guidance process carried out by the nursing professional study program, namely in working on modules, full-length tests, and final tests with the SINERSI Mobile application where in the process of working students must be connected to an internet signal using cellphone or laptop (Simamora, Daulay, Sagala, & Siregar, 2022). Most of the internet signal has been an obstacle for students when taking tests on the SINERSI mobile application because quite a few of them, when working on questions, sometimes experience problems when they want to send answers so that the answers, they have filled in are not recorded. Students must repeat themselves to answer the questions. Internet use is also closely related to

online guidance by supervisors via the ZOOM application (Mpungose, 2023). Many archipelago students need a better internet connection, so they could be more optimal in following INCE's guidance. Another problem is the limited electricity supply in several places, which affects the battery power of laptops and cellphones, where most students use electronic media in the learning process and guidance on INCE questions. The environment is where students acquire knowledge, function, and develop. The environment includes school, home, classroom, peers, and individual development, including social, psychological, and physical needs (Akem, 2008). Most experts argue that the learning environment influences students' academic performance, including exam performance (Ajayi, Ekundayo, & Osalusi, 2010; Olorundare, 2011). Student performance or academic achievement can be further enhanced by encouraging a supportive and healthy environment both at home and school. Several protective factors included parental care and support at home, positive relationships between parents and teachers, a protective and supportive learning environment at home, and a good learning environment at school positively influencing the children's educational achievements during the school period (Epstein & Sheldon, 2006; Gutman & Midgley, 2000; Henderson & Mapp, 2002). The learning environment in the home is predominantly essential for the child's educational accomplishment and social advancement in the learning process at each stage. The school learning environment impacts a child's learning goals and achievement. The school learning environment directly influences the students' learning, engagement in receiving lessons, sense of well-being, motivational level, belonging, and interaction with the teacher. For instance, a learning environment with educational materials and encouraging physical facilities will likely benefit learning (Mallick, 2016). Schools' physical facilities availability and utilization considerably impact student performance and outcomes. School facilities are essential for students to learn; inappropriate environments cause ineffective learning environments (Amanullah & Adeeb, 2014).

The research results showed that the archipelago nursing students' learning motivation receives a lot of support from their families and parents, both moral and material. Most students stated that they were motivated to learn during their professional nurse education because students can learn and practice simultaneously with the patients directly in the clinical practice area. Students were enthusiastic about self-confidence and ability because they attended various trainings, workshops, and tryouts so they could confidently answer the INCE questions. They already have the capital to study

diligently beforehand and are optimistic about answering the INCE's questions. Several studies found a relationship between motivation and the level of passing the Nurse competency test (Khasanah, Sudiyanto, Ariyanti, & Fatmawati, 2017). Previous research conducted in the United States from a nursing higher education institution reported that financial difficulties and limited study time for the competency test impacted them, so they had to wait 4 to 6 months after graduating to complete the test (Carr, 2011). Factors such as gender, competency test completion time, ethnicity, anxiety, critical thinking skills, and course grades were all investigated as reasons for first-time test failure.

Motivation is directly linked to the learning process. Motivation drives students to increase interest, desire, and enthusiasm in learning and show perseverance to achieve specific goals. Motivation plays a critical role in deciding the quality of learning outcomes obtained by students. Previous research found a significant relationship between the learning process motivation level and the achievement level completed by students (Widyastuti & Widodo, 2018). Therefore, increasing learning motivation is essential to improve learning outcomes. This situation can be achieved by optimizing the application of learning principles, magnifying dynamic elements in the teaching-learning process, optimizing the use of experience and capacity possessed by students, and developing goals and aspirations in the learning process. Some factors precede motivation, such as academic, personal, family, social, and professional factors, that provoke activities based on a goal and induce the inception of results, namely, academic achievement. Individuals with distinct personalities have various motivations and precedence. In addition, a person's motivation varies according to circumstances. Motivation can be induced both extrinsically and intrinsically (Ryan & Deci, 2000). Internally motivated students have the motivation to study, work, and succeed (Ryan & Deci, 2000).

Many authors emphasize internal motivation because of a higher tendency to overcome academic challenges, a more powerful self-image, greater creativity, and better academic performance (Khalaila, 2015; Ryan & Deci, 2000). Additionally, excessive dependence on external motivation (e.g., grades) risks students' l engagement and mortality (Ryan & Deci, 2000). One such primary characteristic of the academic motivation concept based on literature reviews and student interviews is that motivation is the driver and director of a person's academic performance. A lot of researchers adopted

these attributes to provide definitions of the motivation concept, and almost an agreement concerning this description. Motivation leads behavior, directs the behavior in a specific direction, and increases effectiveness.

Many studies define motivation as the key to learning (Abootorabi, 2011; Aktaş & Karabulut, 2016; Hassankhani, Mohajjel Aghdam, Rahmani, & Mohammadpoorfard, 2015; Kosgeroglu, Acat, Ayranci, Ozabaci, & Erkal, 2009) and student educational success (Nilsson & Warrén Stomberg, 2008; Rose, 2011; Shakurnia, Alijani, Khajeali, & NiakanKalhori, 2015). The social context of the learning environment affects the students' motivation (Ryan & Deci, 2000). For example, the approach to framing instruction can impact the student's learning process and subsequent skills (Vansteenkiste, Simons, Lens, Sheldon, & Deci, 2004). Therefore, dissimilarities in learning environments affect students' motivation and self-regulated learning (SRL).

Based on research results, the archipelago nursing students use several learning strategies to pass the INCE. The strategy used is attending the workshops, participating in the SINERSI mobile program, participating in national tryouts, national and local INCE tryouts, and group study guidance facilitated by Faculty of Health Science, Wiraraja University Nurse lecturers. In line with previous research, INCE graduation correlates with the level of readiness of the examinee (Hartina, Tahir, Nurdin, & Djafar, 2018). The better the preparation performed by the test taker, the higher the possibility of being competent in the INCE. The exam readiness in this study includes students' understanding of the competency test structure, including the number and type of questions evaluated and strategies for answering questions based on the material taught to provide a good understanding of the competency test material (Nugroho, Harjanto, Purwanta, & Mulyani, 2016). Several studies showed that a lack of knowledge regarding the INCE concept, especially the INCE structure or blueprint, is one of the main obstacles for nursing graduates who fail the INCE (Kholifah & Kusumawati, 2016). Understanding the INCE blueprint is important for INCE participants because it provides an overview of the scope of the material to be tested, which can become a reference in the learning process to focus on more specific and relevant areas (Hartina et al., 2018).

Several studies have shown that tutoring is associated with an increased rate of passing the first competency test (Almasloukh, Miner, Phillips, & Evans, 2023). Case-based learning increases students' productive discussions,

develops critical thinking, and increases mastery of standardized exam content (George & Dellasega, 2011; Kinyon, D'Alton, Poston, & Anderson, 2021). It is stated that all types of case studies (i.e., clinical, integrative, and open scenarios) can provide experience in conducting clinical assessments because they "allow students to connect classroom learning to clinical practice."

Continuous exposure to competency test questions helps students "think like a nurse" in the classroom and clinical environment (AlShammari, Jennings, & Williams, 2018). Courses that provide competency testing practice have proven to be an essential strategy for preparing students to succeed on their first competency exam. Simulation has also been shown to be an effective educational strategy by improving students' critical thinking, clinical judgment, confidence in the clinical environment, and readiness for the RN role (Almasloukh et al., 2023; Brackney, Lane, Dawson, & Koontz, 2017). Various educational strategies to prepare nursing students for the nurse competency test have been described in the literature (Almasloukh et al., 2023), which states the development of several comprehensive teaching strategies will better help students face the nurse competency test and improve their critical thinking skills rather than just focusing on a single teaching strategy"

An effective educator must ensure that students learn well and motivate them to learn (Garwood, 2015). Likewise, self-determination motivation theory is likely positively correlated with the likelihood of passing a competency test. Self-determination theory distinguishes between intrinsic and extrinsic motivation, such as personal interests and values. From the results of a scoping review (n=25), it was stated that the psychological and social dimensions influenced the quality of life of students facing the competency test. Active learning is a strategy that is often found as an aspect related to strategies for dealing with INCE.

Providing intensive supervision before INCE to students is essential. The guidance process provides students with tips and tricks for solving cases that might arise in exam questions. Additionally, intensive supervision also provides insight into how to identify and apply ways to find relevant solutions for each material tested. Understanding various solution search patterns is crucial for students because each material that appears in INCE has a different approach. Improving students' abilities after intensive supervision shows the

importance of guiding the national competency assessment. In line with the mandate conveyed by AIPNI, every nursing educational institution is expected to supervise students to prepare their abilities to face competency assessments, either through practice questions or other supervision procedures in preparation for INCE

Conclusions & NURSING IMPLICATION

The archipelago student learning culture model in the perspective of the success of the Nurse competency test through a qualitative approach explains the background conditions of the learning environment, which describes the use of facilities and search for learning resources, learning activities including learning styles, learning motivation and self-confidence and abilities, learning habits by describing methods studying, concentrating, repeating learning material. Quantitative test results stated that there was a relationship between background, learning activities, and study habits and the success of the competency test for archipelago students, but learning style was found not to be reliable as a factor that could explain the relationship with success in the Competency Test (VL=0.353).

The learning culture of archipelago students in the perspective of success in the INCE was formed starting from the pre-graduate level of education and continuing at the higher and professional levels. Both internal and external motivation influences the learning culture of archipelago students. Research from other perspectives related to the learning culture of nursing students is needed in the process of self-development and increasing the professionalism of nurses in Indonesia

References

Abootorabi, R. (2011). How I could improve academic motivation of my students in an industrial high school? *Procedia-Social and Behavioral Sciences*, *15*, 571–575.

Ajayi, I. A., Ekundayo, H. T., & Osalusi, F. M. (2010). Learning environment and secondary school effectiveness in Nigeria. *Studies on Home and Community Science*, *4*(3), 137–142.

Akem, J. A. (2008). Continuous assessment: A practical handbook for schools. *Makurdi: Selfers Academic Press Limited*.

Aktaş, Y. Y., & Karabulut, N. (2016). A Survey on Turkish nursing students' perception of clinical learning environment and its association with

academic motivation and clinical decision making. *Nurse Education Today*, *36*, 124–128.

Almasloukh, K. B., Miner, M., Phillips, K., & Evans, M. (2023). Educational strategies and nursing theory to prepare leaners for NCLEX-RN. *Nursing Open*, *10*(11), 7144–7153.

AlShammari, T., Jennings, P. A., & Williams, B. (2018). Emergency medical services core competencies: a scoping review. *Health Professions Education*, *4*(4), 245–258.

Amanullah, H., & Adeeb, A. (2014). Analysis of School Teachersi¯ Practices for Quality Education in View of Their Head Teachers at Secondary Level. *International Journal of Learning and Development*, *4*(4), 57–63.

Brackney, D. E., Lane, S. H., Dawson, T., & Koontz, A. (2017). Simulation performance and national council licensure examination for registered nurses outcomes: Field research perspectives. *Creative Nursing*, *23*(4), 255–265.

Carr, S. M. (2011). NCLEX-RN pass rate peril: One school's journey through curriculum revision, standardized testing, and attitudinal change. *Nursing Education Perspectives*, *32*(6), 384–388.

Creswell, J. W. (2016). *Pendekatan Metode Kualitatif, Kuantitatif dan Campuran* (4th ed.). Yogyakarta: Pustaka Pelajar.

Epstein, J. L., & Sheldon, S. B. (2006). Moving forward: Ideas for research on school, family, and community partnerships. *SAGE Handbook for Research in Education: Engaging Ideas and Enriching Inquiry*, 117–138.

Farrell, G. J., Peters, S. D., & Rourke, J. T. (2010). Memorial University of Newfoundland Faculty of Medicine. *Academic Medicine*, *85*(9), S690–S693.

Forsman, H., Jansson, I., Leksell, J., Lepp, M., Sundin Andersson, C., Engström, M., & Nilsson, J. (2020). Clusters of competence: Relationship between self-reported professional competence and achievement on a national examination among graduating nursing students. *Journal of Advanced Nursing*, *76*(1), 199–208.

Garwood, J. K. (2015). Millennial students' preferred methods for learning concepts in psychiatric nursing. *Journal of Psychosocial Nursing & Mental Health Services*, *53*(9), 38.

George, D. R., & Dellasega, C. (2011). Use of social media in graduate-level medical humanities education: Two pilot studies from Penn State College of Medicine. *Medical Teacher*, *33*(8), e429–e434.

Gutman, L. M., & Midgley, C. (2000). The role of protective factors in supporting the academic achievement of poor African American students during the middle school transition. *Journal of Youth and Adolescence*, *29*(2), 223–249.

Haas, S., Swan, B. A., & Jessie, A. T. (2020). The Impact of the Coronavirus Pandemic on the Global Nursing Workforce. *Nursing Economic$*, *38*(5).

Hartina, A., Tahir, T., Nurdin, N., & Djafar, M. (2018). Factors related to passing the Indonesian competency test (UKNI) in the Sulawesi region. *Journal of the Indonesian National Nurses Association (JPPNI)*, *2*(2), 65–73.

Hassankhani, H., Mohajjel Aghdam, A., Rahmani, A., & Mohammadpoorfard, Z. (2015). The relationship between learning motivation and self efficacy among nursing students. *Research and Development in Medical Education*, *4*(1), 97–101.

Henderson, A. T., & Mapp, K. L. (2002). *A New Wave of Evidence: the Impact of School; Family;, and Community Connections on Student Achievement*. National Center for family & community connections with schools.

Hidayat, S., Arief, Y. S., & Efendi, F. (2023). *BUKU PANDUAN BUDAYA TIDUR BERALASKAN PASIR BERBASIS TRANSCULTURAL NURSING*. Airlangga University Press.

Hidayat, S., Arief, Y. S., Effendi, F., Hannan, M., & Huzaimah, N. (2023). The Context of Nursing Intervention of Sand Bed Culture in Reducing Osteoarthritis Pain Scale. *Journal of Medicinal and Chemical Sciences*, *6*(10), 2387–2396.

Hyland, J. R. (2012). *Building on the evidence: Interventions promoting NCLEX success*.

Kemenristek Dikti. (2016). *Implementasi Uji Kompetensi Nasional bidang Kesehatan sebagai Langkah Konkrit Penjaminan Mutu Pendidikan Tinggi Kesehatan*. Retrivied.

Khalaila, R. (2015). The relationship between academic self-concept, intrinsic motivation, test anxiety, and academic achievement among nursing students: Mediating and moderating effects. *Nurse Education Today*, *35*(3), 432–438.

Khasanah, U., Sudiyanto, H., Ariyanti, F. W., & Fatmawati, A. (2017). Analisis faktor-faktor yang berhubungan dengan tingkat kelulusan uji kompetensi mahasiswa S1 keperawatan di STIKes Majapahit Mojokerto. *Medica Majapahit (JURNAL ILMIAH KESEHATAN SEKOLAH TINGGI ILMU KESEHATAN MAJAPAHIT)*, *9*(2).

Kholifah, S., & Kusumawati, W. (2016). *Hambatan lulusan ners dalam menghadapi uji kompetensi Health Science*.

Kinyon, K., D'Alton, S. V, Poston, K. M., & Anderson, B. S. (2021). Changing student outcomes without sacrificing student satisfaction. *Journal of Nursing Education*, *60*(3), 169–171.

Kosgeroglu, N., Acat, M. B., Ayranci, U., Ozabaci, N., & Erkal, S. (2009). An investigation on nursing, midwifery and health care students' learning motivation in Turkey. *Nurse Education in Practice*, *9*(5), 331–339.

Lestari, I. M. T., Tahir, T., & Sjattar, E. L. (2023). HUBUNGAN EVALUASI HASIL TRY OUT UJI KOMPETENSI NERS BERDASARKAN TINJAUAN BLUE PRINT DENGAN PREDIKSI KELULUSAN PESERTA DALAM UJI KOMPETENSI NERS. *Jurnal Berita Kesehatan*, *16*(1).

Mallick, M. K. (2016). Academic Resilience among Senior Secondary School Students: Influence of Learning Environment. *Rupkatha Journal on Interdisciplinary Studies in Humanities*, *8*(2).

Moleong, J. (2013). Metodologi Penelitian Kualitatif. *Metodologi Penelitian Kualitatif*.

Mpungose, C. B. (2023). Lecturers' reflections on use of Zoom video conferencing technology for e-learning at a South African university in the context of coronavirus. *African Identities*, *21*(2), 266–282.

Naafi'a, N., Efendi, F., & Wahyuni, S. D. (2020). Prediktor Kelulusan Mahasiswa Keperawatan dalam Uji Kompetensi Ners Indonesia (UKNI) di Fakultas Keperawatan Universitas Airlangga. *Jurnal Penelitian Kesehatan" SUARA FORIKES"(Journal of Health Research" Forikes Voice")*, *12*, 152–158.

Nilsson, K. E. L., & Warrén Stomberg, M. I. (2008). Nursing students motivation toward their studies–a survey study. *BMC Nursing*, *7*, 1–7.

Nugroho, A. S., Harjanto, T., Purwanta, P., & Mulyani, S. (2016). *Gambaran Persepsi Mahasiswa Profesi PSIK FK UGM tentang Uji Kompetensi Ners Indonesia*. Gadjah Mada University , Yogyakarta.

Olorundare, A. S. (2011). Correlates of poor academic performance of secondary school students in the sciences in Nigeria. *International Institute for Capacity Building in Higher Education, Virginia State University, USA*.

Palingrungi, B., Kadar, K. S., & Sjattar, E. L. (2021). FAKTOR PREDIKTOR KELULUSAN UJIAN KOMPETENSI NERS INDONESIA: TINJAUAN LITERATUR: Predictors of Ners Indonesia Competency Exam Graduation:

Literature Review. *Jurnal Ilmiah Keperawatan (Scientific Journal of Nursing)*, *7*(1), 97–106.

Rose, S. (2011). Academic success of nursing students: Does motivation matter? *Teaching and Learning in Nursing*, *6*(4), 181–184.

Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, *25*(1), 54–67.

Sears, N. A., Othman, M., & Mahoney, K. (2015). Examining the relationships between NCLEX-RN performance and nursing student factors, including undergraduate nursing program performance: A systematic review. *Journal of Nursing Education and Practice*, *5*(11), 10–15.

Serembus, J. F. (2016). Improving NCLEX first-time pass rates: A comprehensive program approach. *Journal of Nursing Regulation*, *6*(4), 38–44.

Shakurnia, A., Alijani, H., Khajeali, N., & NiakanKalhori, S. R. (2015). Nursing students motivations and satisfaction, Do the motivation and satisfaction of nursing students change during their study years. *Nursing*, *13*.

Simamora, F. A., Daulay, N. M., Sagala, N. S., & Siregar, H. R. (2022). Lecturer's Experience of Guiding Students Facing Exit Exam as A Requirement to Get A Ners Degree. *INDONESIAN NURSING JOURNAL OF EDUCATION AND CLINIC (INJEC)*, *7*(2), 184–195.

Sugiyono, D. (2013). *Metode penelitian pendidikan pendekatan kuantitatif, kualitatif dan R&D*.

Syapitri, H., & Hutajulu, J. (2020). Strategi Mahasiswa Profesi Ners Dalam Menghadapi Uji Kompetensi Ners di USM Indonesia. *Jurnal Surya Muda*, *2*(2), 76–84.

Vansteenkiste, M., Simons, J., Lens, W., Sheldon, K. M., & Deci, E. L. (2004). Motivating learning, performance, and persistence: the synergistic effects of intrinsic goal contents and autonomy-supportive contexts. *Journal of Personality and Social Psychology*, *87*(2), 246.

Waliulu, S. H., & Rumakey, R. S. (2022). Strategies for Passing UKOM Exit Exam for Nurse Profession Program in AIPNI Region XIII. *Health Notions*, *6*(11), 476–480.

Widyastuti, E., & Widodo, S. A. (2018). *Hubungan Antara Minat Belajar Matematika Keaktifan Siswa Dan Fasilitas Belajar Disekolah Dengan Prestasi Belajar Matematika Siswa Kelas X Smk Se-Kecamatan Umbulharjo*.

Learning Culture in the Perspective of the Successful of Indonesian Nurse Competency Examination

ORIGINALITY REPORT

9%	7%	4%	1%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	www.researchsquare.com Internet Source	1%
2	pdfs.semanticscholar.org Internet Source	1%
3	www.jmchemsci.com Internet Source	1%
4	Khalid Bandar Almasloukh, Melissa Miner, Kathleen Phillips, Michael Evans. " Educational strategies and nursing theory to prepare leaners for ", Nursing Open, 2023 Publication	1%
5	jurnalkeperawatanglobal.com Internet Source	<1%
6	Cevriye Yüksel Kaçan. "Does the nursing students' perceived level of compassion correlate with affect their perception of spiritual care?", Nurse Education Today, 2023 Publication	<1%
7	etheses.whiterose.ac.uk	

	Internet Source	<1%
8	Submitted to Union University Student Paper	<1%
9	www.science.gov Internet Source	<1%
10	cdigital.uv.mx Internet Source	<1%
11	journalarsvot.com Internet Source	<1%
12	library.stikessaptabakti.ac.id Internet Source	<1%
13	scholar.ufs.ac.za Internet Source	<1%
14	123dok.com Internet Source	<1%
15	H Ariyani, A Robby. "Pruritus Overview of Chronic Kidney Failure Patients Using Visual Analogue Scale Application In Hemodialysis Unit General Hospital dr. Soekardjo, Tasikmalaya City, West Java", Journal of Physics: Conference Series, 2020 Publication	<1%
16	Laxmi Sen Thakuri, Chul Min Park, Jin Woo Park, Hyeon-A Kim, Dong Young Rhyu.	<1%

	"Subcritical water extraction of Gracilaria chorda abbreviates lipid accumulation and obesity-induced inflammation", Algae, 2023 Publication	
17	journal2.stikeskendal.ac.id Internet Source	<1 %
18	docplayer.net Internet Source	<1 %
19	www.internationaljournalofcaringsciences.org Internet Source	<1 %
20	apps.spmb.unsoed.ac.id Internet Source	<1 %
21	coek.info Internet Source	<1 %
22	jurnal.globalhealthsciencegroup.com Internet Source	<1 %
23	Ida Wahyuni. Kesmas Indonesia, 2023 Publication	<1 %
24	discovery.dundee.ac.uk Internet Source	<1 %
25	etd.repository.ugm.ac.id Internet Source	<1 %
26	journal.stkipsingkawang.ac.id Internet Source	<1 %

27	stikesyahoedsmg.ac.id Internet Source	<1%
28	www.csm.edu Internet Source	<1%
29	www.ncbi.nlm.nih.gov Internet Source	<1%
30	www.researchgate.net Internet Source	<1%
31	www.scribd.com Internet Source	<1%
32	"Minutes of The 43rd General Assembly of The European Association for The Study of Diabetes", Diabetologia, 2008 Publication	<1%

Exclude quotes	Off	Exclude matches	Off
Exclude bibliography	On		