

**ENGAGEMENT AND COMPETENCE AMONG STUDENT NURSES IN A  
STATE UNIVERSITY IN AKLAN**

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**ABSTRACT**

Various modalities have been implemented in educating the student nurses like blended learning, online education, and simulation. Due to the several transition periods experienced by the student nurses related to the pandemic, the student engagement and clinical nursing skills need to be revisited. This descriptive correlational study aimed to explore the relationship between student engagement and perceived skill competence among second- to fourth- year student nurses in a state university in Aklan, Philippines. With possible scores ranging from 1.0 to 4.0, the overall student engagement in three (3) domains behavioral (2.92), cognitive (2.59), and emotional (2.97) are high. Overall perceived student skill competence is good. Student rated themselves to be only fairly performing on procedures including chest tube management, tracheostomy care, blood transfusion, enema administration, upper airway suctioning, perioperative care, catheter insertion, venipuncture, tube feeding, postural drainage, and intravenous medication administration. Student engagement has no relationship with the perceived level of nursing skill competence. Varied classroom engagement activities can be continued. Areas for improvement of skills competence must be addressed.

***Keywords:* student competence, behavioral engagement, emotional engagement, cognitive engagement, skills competence**

## **Chapter 1**

### **Introduction**

#### **Background and Rationale of the Study**

Nurses play a vital role during the pandemic, which resulted in higher demands for their services worldwide. The demand equated to the increase of student nurses, which challenged the academe on effective delivery of necessary knowledge and skills. Alternative mode of teaching through modules and supplementary videos aid students in learning, but its effectivity remains incomparable to actual demonstrations in the classroom setting.

As per CMO 15 series of 2017, the implementation of outcome-based education aims to produce graduates who are highly competent in terms of technical skills, academics, and attitude. It is crucial to monitor students' performance during the changing of modalities. (Association of Deans of Philippine Colleges of Nursing, Inc. 2018). The competence of the students is measured by how they perform specific skills and display appropriate behavior as a nurse. Students' performance in academics is determined by general point average and signifies how good the student, teacher and the university are in meeting the institutional objectives (Tadese et al., 2022). Both behavior and performance are requirements for a student nurses to be competent.

The two-year span of transitions in teaching modalities impacted students and teachers psychologically. Experiences of isolation, changes in the instruction and personal trauma necessitate evaluation of student behavior, activity involvement, as well as students' interest in their chosen degree. Delfino (2019) furthered that these are associated with increased academic success and has consistently proven to be a reliable indicator of achievement and conduct in educational settings. The study of

Schult et al. (2022), indicated that students with poor performance in mathematics classes have learning backlogs which require more attention in higher education. In addition, socio-cultural status and the number of students who relocated, played a minor role in facilitating educational loss. However, lesser socio-cultural capital was absolutely connected with larger learning losses (Schult et al., 2022). In a certain institution in Aklan, the clinical instructors monitored students' performance in class and their adjustment to the new mode of instruction. It has been observed that some students, particularly those nearing graduation, are less capable than students in earlier years of performing simple tasks.

Student engagement has been an influencing factor to the fluctuating academic performance or competencies in a learning process. Due to its potential to address issues like early dropout and subpar performance, research on student engagement has recently become more and more popular (Yang et al., 2023). It was defined by Bagheri & Zohre (2021), as a student's willingness to participate in regular school activities including attending class, turning in homework, and paying attention in class. It was supported by the study of Abaidoo (2018), that being motivated, attending class regularly, good study habits, hard work and great interest in a subject are the qualities needed to help students improve their performance in school. They should be empowered and directed to take responsibility for their studies by having good study habits and perfect attendance in class (Abaidoo, 2018). A study from Partido State University revealed that the three dimensions of student engagement namely: Emotional, Behavioral and Cognitive were positively correlated to the academic performance of students, which means the performance depends on how engaged they are (Delfino, 2019).

Hence, this study is conducted to determine post-pandemic student engagement focusing on both regular classrooms and clinical areas where student nurses conduct clinical duties. Simultaneously, it measured their perceived skill competence regarding handling different types of clientele as reflected in their syllabus. The result of this study would yield the formulation of new study areas in the new normal instruction which are worthy of further investigation.

### **Objectives of the Study**

This study aimed to determine the relationship between student engagement and perceived skill competence among student nurses at a state university in Aklan.

Specifically, this study aimed to:

1. describe the socio-demographic profile of the student nurses in terms of sex, year level, and monthly family income.
2. determine the level of engagement of the student nurses;
3. determine the perceived skill competence of student nurses; and
4. determine whether there is a significant relationship between student engagement and perceived skill competence.

### **Hypothesis of the Study**

The following hypothesis was tested in this study:

1. There is no significant relationship between the level of student engagement and perceived skill competence among student nurses in a State University in Aklan.

### **Theoretical Framework**

This study was anchored in Astins' Student Involvement Theory (1985) which discussed the relationship between engagement and perceived skill competence of

student nurses and their courses. This framework explained the desired outcomes of every university that concerns students' experience, specifically their development over time due to extracurricular activities. The theory comprised students' inputs including factors such as their upbringing, previous experiences, and demographics. It also comprised students' environment such as the different types of skills they could learn from the university. Finally, competence as an output, which includes students' knowledge and skills developed through lecture and laboratory skills exposure.

It is said that students are most likely to get involved or become more engaged in instructional activities if it displays the interest, need and congruence to their values. In relation to competence, it is vital to construct environments that improve people's views of competence if the objective is to drive them to strive for performance excellence. Individuals improve their perceptions of competence when they succeed at optimally difficult activities and when they are provided with supportive, motivating, consistent, and knowledge-based feedback.

### **Conceptual Framework**

Figure 1 shows the framework used in this study. As this study focused on the relationship between student engagement and their competence the following variables are identified: The independent variables for this study were the engagement of student nurses that might relate to their current competence status. Student engagement can be measured through the three domains: a) Behavioral Engagement which includes attendance and completing homework, b) Cognitive Engagement which refers to developing learning strategies to gain knowledge and skills, and lastly c) Emotional Engagement which shows student response to their learning environment. These domains have been examined by to define student engagement. According to the study

of Quigley et al. (2022), academic achievement has been demonstrated to be positively correlated with all three of these types of engagement. Beyond better academic performance, student engagement results in various positive impacts. It has been suggested, for instance, that engagement may influence how students assess the university after finishing their degree.

The dependent variable identified the perceived skill competence of students of the concepts covered in their specific year level. One current issue was student nurses' competence, which is a crucial indicator of nursing standards. With this conceptual framework, the research question, "whether there is a significant relationship between the level of student engagement and perceived skill competence" was addressed.

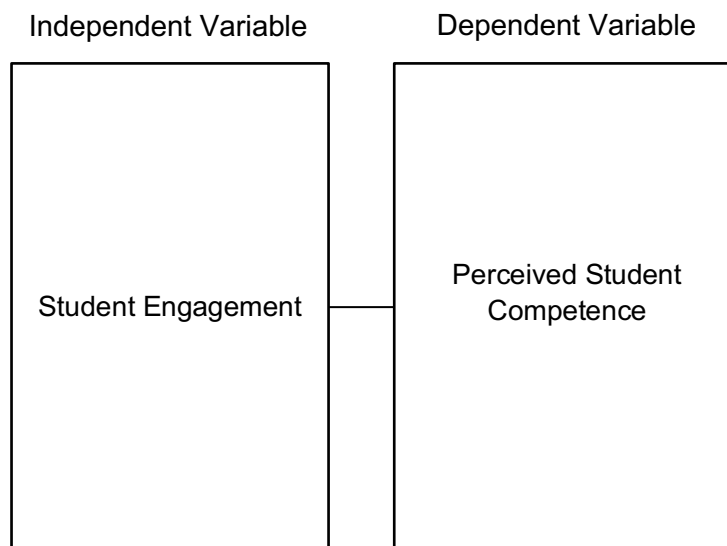


Figure 1. Paradigm of variables under study

## Operational Definition of Variables

The following terms were used in this study:

*Student Engagement.* It is an active involvement of students in their education in terms of their interaction to the administrator, professors, co-students, and curriculum instruction (Delfino, 2019). In this study, student engagement refers to the level of active involvement of student nurses in both lectures and related learning experiences. It was measured in three (3) domains: behavioral, cognitive, and emotional. Categorized as follows: Low if the mean score is 1.0 to 1.99, Moderate if the mean score is 2.0-2.57, High if the score is 2.58-3.57, and Very High if the score is 3.58 to 4.0.

*Behavioral Engagement.* It refers to students' participation in academic and extracurricular activities (Fredericks,2004, as cited in Delfino, 2019). In this study, this term refers to how student nurses involve themselves in the activities inside the classroom or clinical areas such as asking questions, submitting activities and their attendance.

*Emotional Engagement.* It refers to students' positive and negative reactions to peers, teachers, and school (Fredericks,2004, as cited in Delfino, 2019). In this study, this term refers to the student nurse's ability to interact with others and perform tasks with a group.

*Cognitive Engagement.* Talks about students' thoughtfulness and willingness to master difficult skills (Fredericks,2004, as cited in Delfino, 2019). In this study, this refers to how student nurses' effort in completing requirements for the class i.e. making presentations, ideas and discussing with others.

*Perceived Student Competence.* Students developed and applied competencies are a combination of attitudes, skills, and knowledge for successful learning, living, and working (*Student Competencies*, n.d.) In this study, this refers to the perceived skills

competence of the student nurses from Level 2 to 4. To measure the perceived skill competence the researcher adopted the Clinical Competencies Questionnaire (CCQ) developed by Liou and Cheng: a questionnaire with 47 items focusing on nursing behaviors and skill competencies. It will be categorized as follows: (4) Very Good if the mean score is 4.51-5.0, (3) Good if the mean score is 3.51-4.50, (2) Fair if the mean score is 2.51-3.50, (1) Poor if the mean score is 2.50-1.00.

### **Significance of the Study**

This study is expected to be beneficial to the following groups:

*Student Nurse.* The study is a student evaluation of their engagement status and perceived skills competence and explains its relationship. Thus, it provides insights on what areas need improvement whether in engagement (behavioral, cognitive, emotional) or skills.

*Nurse Educators.* This study can be utilized as a guide for the instructors to develop different approaches, techniques, and instructional materials based on engagement status to attain the desired level of competence among student nurses.

*School Administrators.* The result of the study could be a basis for the administrators to choose a teaching design appropriate for the student nurses, to address the fluctuating level of competence. It could also provide insight to the deans or coordinators on relevant areas to focus on to strengthen the delivery of classroom instruction and/or related learning experiences.

*Future Researchers.* Other researchers may use the study's findings as a guide for related subsequent studies. The study's recommendations may be used to advance the research, create new studies based on the same references, or carry out related studies focusing on various indicators and respondents divided into various profiles.

***Scope and Limitation of the Study***

This study aimed to determine the relationship between the level of student engagement and their perceived skills competence at a state university in Aklan.

This involved students from Level 2 to 4 enrolled in a State University in Aklan under the Nursing Program for the academic year 2023-2024. The sample was randomly picked per stratum. Students enrolled in the nursing courses and related learning experiences were the only ones qualified for the study. A quantitative, descriptive-correlational design was used with a self-administered questionnaire as an instrument. The questionnaires provided do not include factors that might affect the engagement and competence of the student. The student engagement and perceived skill competence were determined through a self-evaluation checklist form. The study started upon approval from August 2023 to May 2024.

## Chapter 2

### Review of Related Literature

This chapter includes the concepts and pertinent literature and studies. Its inclusions assisted in gathering accurate and thorough material relevant to this study.

#### **Related Concepts**

##### ***Student Engagement***

Prior to the pandemic, there had been extensive research on student engagement, and various influences had been identified. In the study of Paulsen and McCormick (2020), it was cited that engagement of students in learning was determined based on the given time and effort or commitment that inspired and encouraged their success. Their opinion about the different modalities during pandemic and student engagement is that active learning, peer teamwork, and communication with faculty are important components of student engagement but neither presuppose nor demand face-to-face training (Paulsen & McCormick, 2020). There is no central reason that anticipated variances linked to learning delivery for the majority of engagement-related aspects (Paulsen & McCormick, 2020). However, equivalency should not be taken for granted, and effort to measure the educational efficacy of online learning should look into the effect of delivery mode in participation (Paulsen & McCormick, 2020).

Similarly, the University of Washington had the same input with regards to the involvement of instructors to student engagement status, but it emphasized the use of a student-centered approach. It was stated that a student-centered approach to instruction increased engagement and enabled the subject learning objectives effectively (University of Washington, 2023). Active learning is a good example of teaching

strategies in which students are able to actively participate through question-and-answer sessions, experiential learning, and hands-on activities. The researcher agreed that engagement is based on instructors' love for teaching but would also like to take into consideration students' ability to adapt and achieve such aims.

### ***Student Perceived skill competence***

The pandemic has raised concerns among administrators of medical programs, like nursing, on training future nurses who are not only qualified but also practically competent. The competence of graduates has long been a topic of debate. Since the 1960s, the term "competence" has been frequently used in the literature on pedagogy and linguo didactics to refer to a person's capacity to perform any task based on life experience and learned knowledge and skills (Kulik et al., 2020). According to Chomsky (year), the use of knowledge, skills, and abilities acquired through experience was later referred to as competency. This use of acquired knowledge in the form of knowledge, skills, and abilities was later called competency (Kulik et al., 2020). It is not being competent if the students are just able to obtain knowledge and skills from a certain course not unless it was being used or they are able to use it through experiential learning during their on-the-job training.

Wolf (n.d.) further supported the claim that competence is related to classroom and clinical learning environments, which affect how students develop complex skills necessary to render quality patient care. With deep understanding of the concepts, active involvement in clinical practice and integrating learning through reflection, students will be competent (Wolf, n.d.). Competencies are considered the by-product of the learning process through the institution and the instructors. High quality education, developed nursing competence and increased quality of nursing care, are results of

learning competence (Örs, n.d.). Student nurse's competence must be achieved prior to entry to the nursing profession, this ensures providing safe and effective patient care no matter the obstacle.

Animated video clips of nursing procedures and video conferencing have both been used on the online platform to continue nursing education during the pandemic. Findings from other studies, claimed that these alternative instructions established e-learning and greatly influenced students' academic accomplishments. E-learning helped students to maximize their learning independence and participation in class (Hamdan & Amorri, 2022). In contrast, Capone et al. (2021) claimed that some students have reported feeling stressed during the pandemic as a result of potential declines in teaching quality or satisfaction, financial constraints, and other factors. This stress may have had an impact on their mental and academic health (Capone et al., 2021). Students' performance and achievement can be indicators of their competence and factors that affect their performance and achievement might influence their competence as well.

## **Related Studies**

### ***Student Engagement***

In the past ten years, researchers, practitioners, and policy makers have paid close attention to the conceptualization and measurement of "student engagement". A study from Pangasinan State University showed that students had a high level of behavioral and emotional engagement, which are found directly linked with each other, toward their peers. Additionally, it was found that moderate academic engagement was influenced by but has no relationship with academic performance (De Jesus, 2019). Furthermore, the results indicated that student engagement in science activities is more

or less likely correlated with their behavioral or emotional engagement. Statistically, there is moderate positive correlation between student's behavior and emotional engagement (De Jesus, 2019).

Digital technology has taken center stage in higher education having a profound impact on all facets of the student experience (Bond et al., 2020). Technology intensified teaching and learning procedures, enhanced students' self-regulation and self-efficacy, boosted participation and involvement in courses, as well as the larger university community, and forecasted higher levels of student engagement (Bond et al., 2020). Although, there is no assurance that adopting technology will result in active student participation, as second-order meta-analysis found only a small to moderate impact on student accomplishment over a 40-year period (Bond et al., 2020). There are few studies examining the relationship between online learning and student engagement. The result revealed that during normal classes, students had high levels of environmental support, learning with teamwork, and faculty collaboration. As for online instruction, they gained benefits in terms of perceived challenges in academics, better time management to study, and a lot of learning and fulfillment (Paulsen & McCormick, 2020).

### ***Demographic Profile and Student Engagement***

Studies on student engagement have identified various impactful variables, one being the student's demographic profile. Student engagement refers to the degree of student's willingness to participate and get involved in school activities both curricular and non-curricular. According to the study of Jawthari and Stoffa (2022), the demographic factors examined included gender, region, highest level of education, IMD, age range, number of prior course failures, number of credits studied, and disability. The findings show a correlation between high engagement levels and gender, highest

education, studied credits, and number of prior attempts. Another study from Ćirić (2022), examined the relationship between student engagement and sociodemographic characteristics that included gender, economic status, parent's educational level using the NSSE (National Survey of Student Engagement Indicators, 2018). According to the findings, engagement was more pronounced among female students, those from lower socioeconomic backgrounds, and those whose parents had less education (Ćirić, 2022).

According to Nahar et al. (2022), certain socio-demographic factors vary the engagement of every student. Students aging 18-24 scored higher than students aged 25 years and up in academic and social engagement with teachers. It was noted that there are five domains of student engagement namely, academic, cognitive, affective, social engagement with peers, and social engagement with teachers (Nahar et al., 2022).

### ***Sex and Student Engagement***

Active participation of learners inside a regular classroom might vary between genders and depending on the teaching strategies used by the instructors. Using personal experience, females are more active academically, and males are more active in physical activities such as sports. This statement was agreed by the study of Fatou and Kubiszewski (2018), stating that girls score higher on general, cognitive, and behavioral engagement, which is a statistically significant effect of sex on student engagement. Furthermore, taking into account sex and social background revealed no interaction effects, with the exception of behavioral engagement. It was mentioned by Fatou & Kubiszewski (2018) that there is no significant difference in behavioral engagement between girls and boys in the High-Income Average groups, but girls significantly outperformed boys in the Disadvantaged group.

In the study of Hartono et al. (2019), male students must focus on time management during studying, refrain from actions that might result in harming themselves and others, and build positive relationships with peers, teachers, and other students as the study showed a significant difference between gender and their level of student engagement. In contrast, as stated in the study of Aguillon et al. (2020), males are more active than females during class activities with interactions to others like post-activity group discussion. Also, it was discovered that men are more active in volunteering during the class recitation (Aguillon et al., 2020).

### ***Year Level and Student Engagement***

Promoting student engagement early in the semester should be prioritized because the first half of the first semester is crucial for the students' adjustment to college (Ribeiro et al., 2019). This is supported by the study of Hartono et al. (2019), which indicated that there is significant difference between grade level and student engagement. Lower levels get higher scores in comparison with senior years. In history subjects, teachers must use different types of strategies to increase student interest and motivation in learning. Less participation has been found at a higher-grade level student (Hartono et al., 2019).

Another study showed that first-year community college students' self-reported student engagement varied statistically, significantly by age category and between first-generation and non-first-generation college students, showing that demographic factors affect engagement in interpersonal relationships and activities with an educational purpose (Nahar et al., 2022).

### ***Monthly Income and Student Engagement***

Monthly income might be taken into account when determining level of engagement. Some students choose not to participate in class, have poor concentration skills, or even choose not to go because of financial constraints. When students purchase the materials they need for a particular course, allowance plays a big impact (Moneva et al., 2020). But, according to Moneva et al. (2020), the students' commitment to their studies has nothing to do with their school allowances. Therefore, students are more interested in doing their schoolwork despite their daily allowance (Moneva et al., 2020).

During the pandemic, some research showed that families were well aware of the negative effects of the pandemic on their children's academic performance (Howes et al., 2020). Parents revealed that students were having difficulty during online class due to lack of technological resources. This resulted in increased anxiety among students about the possible outcome on their academics (Howes et al., 2020). At the tail-end of the pandemic, the Department of Education together and the Commission on Higher Education (CHED) opened face-to-face classes, but according to Briones (2020), the resources available to households to help children learn are also uneven and depend on a variety of factors, including household income, the level of education of household members, internet access, the number of children in the household who require assistance, and the employment status of household members. .

### ***Student Perceived Skills Competence***

Prior to the outcomes-based learning approach of CHED, competency-based learning was used. In health education, where producing health professionals requires a high level of competence, it is necessary to monitor student nurses ability to work with

competence in the field and making sure to maintain safe and quality patient care. Clinical practice competencies among level 4 student nurses are highly related to the clinical instructor's interaction with them. To reach the goal of good clinical practice competency, it is important to improve the clinical practice protocol by enhancing the ability of instructors in supervising students (Getie et al., 2021).

A study conducted in Turkey found that there is a statistical correlation between the students' nursing competence and their grade point averages. Nursing proficiency was discovered to be connected to the academic year. The highest levels of self-perceived skill competence were found among student nurses in the areas of driving humanitarian causes and developing professional skills. Additionally, this study found that student nurses assessed levels of ability in handling stress were low (Sahin et al., 2021).

Self-awareness, self-regulation, and social skills are only a few examples of the non-cognitive talents and traits that are included in the concept of competence (Kulik et al., 2020). In contrast to personality and IQ, competencies, which are mostly behavioral traits, can be developed through training and development (Kulik et al., 2020). At present, there was no discernible difference between first and final years in the lifetime learning competence of current nursing and midwifery students (Örs, n.d.).

### ***Demographic Profile and Student Perceived Skills Competence***

Perceived competence was based on the student's clinical skills. One of the factors that affected their performance is the demographic profile which includes monthly allowance which depends on the family income. In the Philippines, according to the survey of Sollano et al. (2017), students' typical daily allowance is between 21 Php and

41 Php. Most students have daily allowances of at least 41 Php on the average. Also, the average academic performance of pupils is determined to be between 85 and 89, which is considered "satisfactory" in terms of grades. The study's findings also show a strong correlation between the academic performance of the students and their parents' socioeconomic status (Sollano et al., 2017). As indicated by Salubre (2018), most of the selected grade 11-Quezon students has 20 pesos daily allowance and their academic performance are satisfactory with the mean score of 83.33. Thus, it revealed that academic performance has significant relationship with the students' daily allowance (Salubre, 2018).

### ***Sex and Student Perceived Skills Competence***

Some character differences between males and females have been discovered via teaching experiences. Academic performance may vary based on sex. The results of the multilevel latent class analysis showed that Japan was in the most successful group, while Turkey and Chile were in the low achievement category across all skills. Additionally, the findings demonstrated that some competence levels were significantly impacted by both sex and education level (Yalçın, 2019). A study about clinical competence in nursing practice by Mohamed & Fashafsheh (2019) found a strong correlation between gender and clinical competence, demonstrating that female students' clinical competence was superior to male students' regarding aspects of history taking and professionalism. Another study concluded that self-assessment is related to the student's gender, it was mentioned that male rates are higher than female whether rubrics were used by professors or not (González-Betancor et al., 2019).

### ***Monthly Income and Perceived Student Competence***

Several studies support that family income impacts the performance of students. It was found by Wen et al. (2020) that family income is likely to affect the relationship between the parents and the child and income plays the largest role in cognitive ability, study habits and grades. Aside from monetary factors, there and peers' educational goals along with their communication with their mothers were found to be significant to their competence (Wen et al., 2020). Furthermore, home-based material resources also affect study habits.

While low-income students do not think of academics as an independent area of "study," despite appreciating its significance, it has been observed that household income influences one's awareness of one's job prospects and ideals. The experiences of college students from high-income families and those from low-income families are highly diverse, showing how students' economic circumstances influence their interpersonal interactions and potential future job paths (Jeong, n.d.).

Lin and Han (2017) concurred that family income significantly affects students' educational attainment and increased family income can elevate students' educational attainment. Furthermore, it was shown that family income has no apparent effect on students' academic accomplishment. However, in rural areas, financial status has a greater impact on students' educational performance. The results urged China to have educational reforms. (Lin & Han, 2017).

In contrast, Adzido et al. (2016) states that although the financial situation of the family has some influence on pupils' performance, it is not a reliable indicator of superior academic performance. Many students who responded to the survey say that poor family income does not always affect how good they perform academically. According to the findings, the financial situation of families and students' academic success must be

shared responsibilities. As e students are valuable members of a nation, financial interventions from the government and other e parties are essential for the nation's socio-economic development. This study advances the body of knowledge and provides a framework for more study.

### ***Student Engagement and Student Perceived Skills Competence***

Universities aim for student competence for the benefit of the institution and their stakeholders, most especially the students. Students' level of participation helps determine course competency. In the Philippines, research revealed actors that affect student performance. Lack of motivation is one of the most apparent factors (Briones et al.,2021). Students are motivated with reward or incentive and if they are passionate. Additionally, young students had higher academic performance compared with older students and more than half of the respondents have poor motivation (Briones et al.,2021). Another study from Momanyi et al. (2015), revealed that academic performance and students' motivation are strongly associated with one another. This finding is supported by a study by Pintrich & Schunk (1996), that motivation of students to study has a high bearing on their academic performance. This could help the administrators to predict how well the student will perform in school (Momanyi et al.,2015).

During the pandemic, teachers had difficulties keeping students interested in online lessons, preventing disengagement, and assessing each student's level of readiness for their course, especially those who require skill improvement. According to the study of Kuzminykh et al. (2021), both for individual modules and for the cohort, student performance positively correlated to their level of engagement. Additionally, there was a strong correlation between initial interest in each subject and overall

interest, demonstrating that both factors contribute to better academic performance. The study investigated the relationship between student engagement and academic performance of students in online programs (Kuzminykh et al, 2021). The study of Kuzminykh et al (2021), incorporated data on module content engagement from an online learning platform, including the quantity of material views, forum postings, finished assignments, and video watching.

In the Philippines, a study about student engagement and teaching and learning practices among dentistry student claimed that the engagement in extracurricular activities has been associated to better academic performance, but dentistry students may be reluctant to get involved out of concern for their marks, and they may give up on extracurricular activities if their attention is needed elsewhere (Garcia, 2022). The lowest scores, however, were 3.13 and 3.07 for engagement on effect and perseverance and extracurricular-behavioral (Garcia, 2022). Similarly, the nursing curriculum requires effort for students to stay in the program as it is focused on both theory and clinical practice. As mentioned, behavioral engagement through extracurricular activities has a good impact on their academic performance. A study from Partido State University revealed that the three dimensions of student engagement namely: Emotional, Behavioral and Cognitive were positively correlated to the academic performance of students, which means the performance depends on how engaged they are (Delfino, 2019).

### ***Synthesis***

The related literature and studies presented proved that several studies are related to the factors that impact engagement and competence of students but few of those were done post-COVID-19 era and focusing on the health profession. It supports the connection between the demographic profile, engagement, and competence, and the relationship between the two variables. Female students in the lower year level with high

family income are seen to have high engagement, performs well, and feels competent. It was consistent in the findings of many researchers like Briones et al., (2021), Delfino, (2019) and Garcia, M. (2022) that the younger the student, the higher the engagement level and the higher the engagement level, the more competent the student.

## **Chapter 3**

### **Methodology**

This chapter deals with the research design and methodology used, including sources of data, the instrument used, the data-gathering procedure, and the statistical treatment of the data.

#### **Study Design**

Descriptive-correlational design was used in this study. This design was used to collect data about student engagement and perceived skills competence during the study. In this study, a descriptive approach was adopted to describe the engagement of students in three aspects such as behavioral, emotional, and cognitive, and the perceived level of competence. Correlational design was used to identify the relationship between perceived skills competence and level of their engagement.

#### **Study Population and Sampling**

The study population involves 264 level 2 to 4 student nurses from a state university in Aklan. The student nurses from level 2 to 4 are already engaged in Related Learning Experiences (RLE); hence, chosen as the target population for this study.

*Inclusion Criteria.* The participants of the study were chosen based on the following inclusion criteria: (1) bonafide student at the state university and, (2) A level 2,3, and 4 who are enrolled in Academic Year 2023-2024.

*Exclusion Criteria.* The following student nurses were excluded from this study, (1) student nurses who are on leave of absence for any reason and (2) first year student nurses.

This study used stratified random sampling wherein proportionate number of participants were taken from each year level. Thereafter, the respondents were selected randomly from each level based on the computed sample size. (Boswell & Cannon, 2022). The sample size of 159 was computed with the degree of confidence set to 95% which will yield a 5% margin of error using the sampling formula using the following equation:

$$n = \frac{N}{1 + Ne^2}$$

where n is the sample size; N is the population; and e is the margin of error (0.05)

Table 1. Distribution of population and representatives

Year Level	Population		Sample Size (n)
	(N)	%	
2	120	46	73
3	72	27	43
4	72	27	43
Total	264	100	159

### Research Instrumentation

To facilitate the data gathering, a self-administered survey questionnaire checklist type consisting of three (3) parts was used.

Part I consists of the demographic profile of the respondents.

Part II is an adopted questionnaire from the study of Armando P. Delfino (2018) about student engagement that was with three domains such as behavioral, cognitive, and emotional. A Likert scale was used in grading the scores from (4) Always, (3) Often, (2) Sometimes and (1) Never.

Part 3 pertains to the perceived skills competence of the student nurses regarding basic clinical skills adopted in the Clinical Competencies Questionnaire (CCQ) developed by Liou and Cheng. This 47-item questionnaire includes Nursing professional behaviors (16 items), Skill competence: General performance (12 items), Skill competence: Core nursing skills (12 items), and Skill competence: Advanced nursing skills (6 items).

A Likert scale was used with descriptions that facilitates easy understanding such as (5) Know in theory, competent in practice without supervision (4) Know in theory, competent in practice, need contactable sources of supervision (3) Know in theory, can perform some parts in practice independently, need supervision to be readily available. (2) know in theory, but not confident at all in practice (1) Do not have a clue. Based on the study's goals and factors, the questionnaires were both implemented and found pertinent.

#### ***Validity of the Instrument***

For the instrument's validity, the opinion of three experts in research and education was consulted and suggestions regarding instructions were incorporated. The experts were chosen based on the criteria that include (1) a registered nurse working as clinical instructor, (2) with expertise in the field of research in academe or practitioners in nursing and (3) Doctor in Philosophy or master's degree as the highest educational attainment. The researcher used the survey instrument validation rating scale by Good and Scates (1972) to give unified rubrics to assess if the researchers' instrument items are congruent to the objectives of the study (Oducado, R. 2020).

#### ***Reliability of the Instrument***

For reliability testing, Cronbach's Alpha was used to test the consistency of a set of items or how closely related they are as a group. The acceptable reliability coefficient

is 0.70 or higher in most social science research (UCLA Statistical Methods and Analytics, 2021). The student engagement questionnaire has a reliability coefficient of 0.88 and the Clinical Competencies Questionnaire (CCQ) has a reliability coefficient of .94. The validity of the known groups and the content was confirmed. Four components of competence were identified by principal component analysis, which provided a high level of explanation for competence: nursing professional behaviors, core nursing skills, general performance, and advanced nursing abilities Liou and Cheng (2013b). A pilot test was conducted among 10% of the total number of respondents who were not part of the study (Connelly, 2008). The pilot testing was done to 26 nurses from a private college of nursing in the province of Aklan.

### **Ethical Considerations**

The study was submitted to the CPU-Research Ethics Review Board (CPU-RERB) for ethical review and was approved with RERB Code: 2023-295-MS-CORTES. Also, the protocol underwent approval from the technical experts.

*Risk Assessment.* There was no to minimal risk associated with this study as the study involves gaining insight of the engagement and competence. There were no concerns or questions raised during the gathering of data. Respondents were assured that this study is not part of their requirements in school, and they have the option to participate or not, without any influence on their grades.

*Benefits Assessment.* This study benefits the student nurses and instructors to evaluate the status of the student nurses' engagement and competence. Students can identify what areas they need to improve, and instructors may design an appropriate teaching method to attain a high level of engagement and competence. Furthermore, the result could lead to high performance in board ratings and above all the production of globally competent nurses.

*Withdrawal Criteria of participants.* The researcher strictly observed the right to self-determination or the ethical principle of self-respect. The researcher explained that the respondents' decision to quit while participating in or completing the research study was highly respected. There were no respondents who declined to participate or quit during the gathering of data.

*Anonymity and confidentiality of participants/respondents.* Confidentiality is the process of protecting the study participant so that no personal information and study responses provided will be divulged publicly and will be identified with him/her (Venzon and Venzon, 2010). The researcher kept the participants' personal information hidden and used an ID number for anonymity during tabulation of gathered data. Data was kept confidential through a storage box with a key until the research was completed. Raw data will be deleted from the record after the result is disseminated in a public forum.

*Voluntary, non-coercive recruitment of participants/respondents.* Respondents' participation is totally voluntary. An informed consent was acquired. After obtaining and comprehending all relevant information, a competent potential participant decides to participate in research without the use of coercion, undue influence, or enticement (National Ethical Guidelines for Health and Health-Related Research, 2017). The researcher provided a detailed explanation to the participants of the purpose of the study in full veracity. The researcher made sure that the potential participant understood the material completely. During the gathering of data each respondent who had questions about the instrument was honestly and immediately addressed by the researcher.

Moreover, the researcher is working as a faculty of the university where the study was conducted. It was emphasized in the informed consent that this study is not part of the school requirements, and they have the option to participate or not, without any consequence on their grades.

*Disposal of research materials/data.* The electronic copy of the data was kept in a computer that only the researchers have access to with password encryption. Hard copies were stored inside the storage box which only the researchers have access to for three months and will be disposed of after study has been completed and presented through paper shredder.

*Contribution to local capacity building and benefits to local communities.* The result of the study is beneficial in the nursing community especially those who are in academe. The clinical instructors as the facilitators of student nurses in gaining necessary knowledge and skills for their nursing career. The result provides a framework in teaching according to the engagement level or status of the students. With that, the community can benefit from producing highly competent, compassionate, and caring future nurses.

*Incentives or compensation for participants.* The respondents received no compensation or money in participating in this study. As this study has low risks, possible injury or accident is at minimum. However, if there was a case of psychological stress, the participant would be referred to the school guidance counselor and/or psychiatrist as necessary.

*Disclosure or declaration of potential conflict of interest.* The researchers declared that this study is not part of the school requirements and they have the option to participate or not, without any influence on their grades.

### **Data Collection**

A letter of communication was sent to the Office of President of Aklan State University and the Dean of the School of Arts and Sciences -BSN Program informing and seeking permission to conduct the study. Thereafter, a list of the students was sought from the Office of the Dean. Once the participants were randomly selected, each

one was directly contacted by the researcher and secured their consent to participate in the study.

Once consent was secured, the questionnaires were then distributed by the researcher, a checklist type, self-administered questionnaire. It was given face to face during recess. To protect privacy and anonymity, the participants were not required to write their names; instead, they were provided with an ID number created by the researcher. The participant was expected to complete the form within 30 minutes. The researcher was available during the time of survey to make sure that any clarifications from the respondents were addressed accordingly. Once the respondent has completed the form, the accomplished checklist was then placed inside the box. Thereafter, the questionnaire was saved and kept for encoding and researcher has the only access to the raw data from the checklist.

### **Data Processing and Statistical Analysis of Data**

Survey data was processed using an Excel spreadsheet and SPSS software tools. The descriptive component of the data was processed statistically utilizing descriptive statistics like frequency, percentages, and mean score. To test the degree of relationship of each variable, Spearman Rho correlation was used.

The survey for student engagement used a four-point Likert scale to measure their levels. Response for each item of the questionnaire were given scores as follows:

Table 2. Student Engagement descriptive rating, mean & interpretation

<b>Descriptive Rating</b>	<b>Mean Range</b>	<b>Interpretation</b>
Always	3.58- 4.0.	Very High Engagement
Often	2.58-3.57	High Engagement
Sometimes	2.0 – 2.57	Moderate Engagement
Never	1.0 - 1.99	Low Engagement

The survey for student perceived skill competence used a five-point Likert scale to measure their levels. Response for each item of the questionnaire were given scores as follows:

Table 3. Level of Competence descriptive rating, mean & interpretation

<b>Level of Competence</b>	<b>Mean Range</b>	<b>Likert Scale</b>	<b>Interpretation</b>
Very Good	4.51-5.0	5	Know in theory, competent in practice without supervision
Good	3.51-4.50	4	Know in theory, competent in practice, need contactable sources of supervision
Fair	2.51-3.50	3	Know in theory, can perform some parts in practice independently, need supervision to be readily available.
Poor	1.00-2.50	2	know in theory, but not confident at all in practice
		1	Not competent

### **Research Dissemination Plan**

After the conduct of this study, the protocol was presented to the panel of examiners by the School of Graduate Studies. A copy of the protocol was provided to the CPU-Research Ethics Review Board as required.

Results of this study will be shared with the College of Nursing and the university. The names of the respondents will not be mentioned during any presentation and were not included in the manuscript. Furthermore, this study will be presented in any nursing- or education- related conferences to share the results to the nurse professionals and educators in the field. The possibility of publication in a reputable journal is also explored.

## **Chapter IV**

### **Results and Discussion**

This chapter presents the result, analysis, interpretation, and discussion of the gathered data which are in four parts. The first part is the description of the respondents' sociodemographic profile. The second part describes the level of student engagement based on behavioral, cognitive, and emotional aspects. The third part is focused on the level of perceived skill competence of the student nurses. The final part discusses the analysis of the degree of relationship between the two major variables, the level of student engagement and the perceived skill competence of the student nurses. The respondents were the 159 student nurses from Level II- IV enrolled in the academic year 2023-2024.

#### **Socio-demographic Profile**

Table 4 showed the respondents sociodemographic profile such as sex, year level and family monthly income. Descriptive statistics such as frequency and percentage were utilized.

*Sex.* The data showed that most of the respondents were female (79%), and male respondents were only (21%).

*Year Level.* In terms of year level, as the researchers used the stratified sampling method, each level had a specified number of samples. Almost half of the respondents were coming from Level 2 (46%). Both level 3 and 4 consist of 43 respondents that corresponds to 27% of the total respondents.

*Family Monthly Income.* The respondents were also asked about the family monthly income as reflected in table 1. More than a quarter of the student nurses

reported a monthly family income of above 25,001 (27.0%). Other student nurses have the family monthly income of 5,001 to 10,000 (23.9%), and 15,001 to 20,000 (20.8%). There were (9) nine respondents who did not disclose their family income.

Table 4. Distribution of respondents according to the socio-demographic profile (n=159).

<b>Sociodemographic Profile</b>	<b>f</b>	<b>%</b>
<b>Sex</b>		
Female	125	78.6
Male	34	21.4
<b>Year Level</b>		
Level 2	73	46
Level 3	43	27
Level 4	43	27
<b>Family Monthly Income</b>		
Below 5,000	10	6.3
5,001-10,000	38	23.9
10,001-15,000	5	3.1
15,001-20,000	33	20.8
20,001-25,000	21	13.2
Above 25,001	43	27.0
No answer	9	5.7
<b>Total</b>	<b>159</b>	<b>100.0</b>

### **Student Engagement**

The student engagement was measured according to three (3) domains such as behavioral, cognitive, and emotional engagement using an adopted instrument from Delfino (2018) and is measurable with a 4-point Likert scale. Each part consists of a different set of questions that is suitable in assessing their engagement level. Behavioral engagement consists of 11 positive statement questions and 1 negative statement question. Cognitive engagement contains 12 items of questions and emotional engagement consists of 11 items of questions.

### **Student Behavioral Engagement**

Reflected in Table 5 were the student behavioral engagement questions with corresponding mean score. Student nurses reported that their engagement is very high

in terms of coming to class every day ( $\bar{x} = 3.96$ ) and doing homework ( $\bar{x} = 3.72$ ). In addition, they also have high engagement on taking notes ( $\bar{x} = 3.40$ ), participation in small group discussion ( $\bar{x} = 3.18$ ), doing readings ( $\bar{x} = 3.05$ ), getting a good grade ( $\bar{x} = 2.86$ ), studying regularly ( $\bar{x} = 2.84$ ), doing well on a test ( $\bar{x} = 2.74$ ), and asking questions in class ( $\bar{x} = 2.67$ ). However, engagement is only moderate in terms of raising hands ( $\bar{x} = 2.36$ ) and receiving feedback ( $\bar{x} = 2.37$ ).

The results indicated the ability of student nurses to thrive in terms of schedules, homework, group projects, and the ability to pose pertinent questions demonstrated their enthusiastic engagement and active participation in the subject matter. However, it is necessary to investigate areas where students are moderately engaged, like in receiving feedback from the faculties about their performance; with this result reinforcing the consultation schedule of each faculty member to students should be done. This justified the study of Nguyen et al. (2016), stating that higher levels of involvement are reflected in the way that students interact with one another and, more crucially, with the teacher. What really counts during group work is the teacher's involvement. College students should be encouraged to learn independently, and teachers should invent new ways to teach, excite students' curiosity, and foster initiative in their students (Li et al., 2024).

Table 5. Mean Behavioral Engagement Scores per item (n =159)

<b>Student Behavioral Engagement (Positive Statement)</b>	<b>Mean Score</b>
Coming to class every day.	3.96
Doing all the homework problems.	3.72
Taking good notes in class.	3.40
Participating in or small group discussions.	3.18
Staying up on the readings.	3.05
Getting a good grade.	2.86
Making sure to study on a regular basis.	2.84
Doing well on a test.	2.74
Asked questions in class or contributed to class discussion.	2.67
Received prompt written or oral feedback from faculty on your academic performance.	2.37
Raising my hand in class.	2.36
<b>Overall Student Behavioral Engagement Mean (Positive Statements)</b>	<b>2.92</b>
Come to class without completing readings or assignments	3.08
<b>Overall Student Behavioral Engagement (Negative Statement)</b>	<b>3.08</b>

Legend: Low (1.00-1.99), Moderate (2.0-2.57), High (2.58-3.57), Very High (3.58-4.0)

### ***Level of Student Behavioral Engagement***

The data in Table 5.a shows the level of student behavioral engagement. Most of the respondents had high behavioral engagement (83.0%). However, less than a tenth of the students have a low to moderate level of behavioral engagement (8.1%). This means that most of the student nurses enrolled display behavior of willingness and much interest in their chosen course.

Table 5a. Distribution of Respondents according to Level of Student Behavioral Engagement

<b>Level of Student Behavioral Engagement</b>	<b>f</b>	<b>%</b>
Low	1	0.6
Moderate	12	7.5
High	132	83.0
Very High	14	8.8
<b>Total</b>	<b>159</b>	<b>100</b>

### ***Student Cognitive Engagement***

Table 6 reflected the activities of student nurses to exhibit cognitive engagement through their knowledge and skills. Student with high cognitive engagement stated that they put forth effort and uses electronic medium like Facebook to discuss assignment ( $\bar{x}=3.45$ ), they were able to make class presentation ( $\bar{x}=3.35$ ) and work harder to meet the expectations and standard of the instructors ( $\bar{x}=3.19$ ). This meant that most of the student nurses took initiative in reaching out to their classmates and completed their assigned work to go beyond the expectations of the instructors. On the other hand, there were criteria which student nurses find to be in low to moderately cognitively engaged; like using e-mail to communicate instructor ( $\bar{x}=2.19$ ), discussed grades or assignments with an instructor ( $\bar{x}=2.17$ ) and going to professor's office hours to review assignments of tests or to ask question ( $\bar{x}=1.90$ ). With the given data, the overall student cognitive engagement is ( $\bar{x}=2.59$ ) or with high cognitive engagement. Nevertheless, as observed, the student nurse's low engagement was in terms of communicating with their instructors, this suggests that instructors must encourage open communication among students, especially for course work. Participating actively increases students' cognitive engagement. Students that are cognitively engaged set objectives, make plans, track their progress, work through obstacles, and evaluate what they have learned (Moreland University, 2022). According to Sesmiyanti (2018), students must think while completing academic assignments, be eager to learn more, and actively participate in class to demonstrate their cognitive engagement.

Table 6. Mean of student cognitive engagement per item (n=159)

<b>Student Cognitive Engagement</b>	<b>Mean Score</b>
Used an electronic medium (Facebook, group chat, Internet, instant messaging, etc.) to discuss or complete an assignment.	3.45
Putting forth effort.	3.45
Made a class presentation	3.35
Work harder than you thought you could do to meet an instructor's standards or expectations.	3.19
Worked on a paper or project that required integrating ideas or information from previous sources.	3.14
Put together ideas or concepts from different courses when completing assignments or during class discussion.	3.11
Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)	2.99
Prepared two or more drafts of a paper or assignment before turning it in.	2.88
Discussed ideas from your readings or classes with faculty members outside of class.	2.39
Used e-mail to communicate with an instructor.	2.19
Discussed grades or assignments with an instructor.	2.17
Going to the professor's office hours to review assignments of tests, or to ask questions.	1.90
<b>Overall Student Cognitive Engagement Mean Score:</b>	<b>2.59</b>

Legend: Low (1.00-1.99), Moderate (2.0-2.57), High (2.58-3.57), Very High (3.58-4.0)

#### *Level of Student Cognitive Engagement*

In terms of level of student cognitive engagement as shown in Table 6a, majority of the student nurses or 84.3% (134) are with high cognitive engagement. Meanwhile, there are 8.8% (14) of the respondents who are moderately engaged cognitively and 6.9% (11) are in very high cognitive engagement. As the results showed, no student nurses are in low cognitive engagement, which means that most of them are interested and are motivated in participating in activities that develop their knowledge and skills regarding their chosen course.

Table 6a. Distribution of respondents according to level of student cognitive engagement.

<b>Level of Student Cognitive Engagement</b>	<b>f</b>	<b>%</b>
Low	0	0
Moderate	14	8.8
High	134	84.3
Very High	11	6.9
<b>Total</b>	<b>159</b>	<b>100</b>

### ***Student Emotional Engagement***

Student nurse's involvement through their emotions by doing tasks or interacting with their instructors, classmates and even administrators has been measured and the result is reflected in Table 7. The respondents had high emotional engagement as they have the desire to learn about the course materials ( $\bar{x}=3.52$ , they are having fun during class or duty( $\bar{x}=3.50$ ) and able to work with other students on project and requirements during class with ( $\bar{x}=3.47$ ). Meanwhile, there are student nurses who are moderately engaged; they work with a faculty member on activities other than a course work ( $\bar{x}=2.53$ ), talked about career plans with a faculty member or adviser ( $\bar{x}=2.50$ ) and who has tutored or taught other students that either paid or voluntary( $\bar{x}=2.25$ ).

According to data, student nurses are emotionally engaged when they show interest in the course, when they have fun during discussion, and while collaborating with other classmates to complete their task. This exhibits high emotional engagement as overall reflected in the Table ( $\bar{x}=2.97$ ). However, those criteria which students have moderate cognitive engagement need to be addressed, especially concerning faculty-student relationship, and building open communication. The study conducted by Mihai et al. (2022) agreed that students who are highly motivated or emotionally engaged are those students who are less anxious and more confident. In the same study, it was stated that the feeling of helplessness, boredom and the presence of a positive environment greatly impact the student's emotional engagement (Mihai et al., 2022).

Table 7. Mean of student emotional engagement per item (n=159)

<b>Student Emotional Engagement</b>	<b>Mean Score</b>
Really desiring to learn the materials.	3.52
Having fun in class and during duties.	3.50
Worked with other students on projects or requirements during class.	3.47
Worked with classmates outside to prepare class assignments or requirements such as NCP, Drug Study, Case study, Readings etc.	3.30
Being confident that I can learn and do well in the class and RLE duties	3.16
Included diverse perspective in class discussions or writing assignments.	3.13
Had serious conversations with students who are very different from you in terms of their religious, political opinions, or personal values.	2.73
Participated in a community-based project as part of a regular course like involvement during seminars/trainings in the community.	2.57
Worked with faculty members on activities other than course work.	2.53
Talked about career plans with a faculty member or adviser.	2.50
Tutored or taught other students paid or voluntary.	2.25
<b>Overall Student Emotional Engagement Mean Score:</b>	<b>2.97</b>

Legend: Low (1.00-1.99), Moderate (2.0-2.57), High (2.58-3.57), Very High (3.58-4.0)

### ***Level of Student Emotional Engagement***

Table 7a shows the overall level of student emotional engagement with frequency (f) and percentage (%). Majority of the respondents (75.5%) are in high emotional engagement, while there are 13.8% who are very highly emotional engaged, 10.1 % are moderately emotional engaged and only one (1) or 0.6% has low emotional engagement. This proves that most of the student nurses are actively involved in their chosen course emotionally by showing teamwork, involvement in activities and even showing interest in the aspect of conversing about opinions about politics or even personal matters to classmates or instructors.

Table 7a. Distribution of respondents according to level of student emotional engagement

Level of Student Emotional Engagement	f	%
Low	1	0.6
Moderate	16	10.1
High	120	75.5
Very High	22	13.8
<b>Total</b>	<b>159</b>	<b>100</b>

### Perceived Student Competence

Reflected in Table 8 is the result of measuring the perceived competencies of the student nurses in employing nursing behaviors and basic skills to both classroom and clinical settings. A Clinical Competencies Questionnaire (CCQ) developed by Liou and Cheng with a 47-item questionnaire was utilized with 5-point scoring and was adopted with permission.

The data shows that the top 5 nursing behaviors and skills competencies that the students were able to do with competence as perceived, indicated with mean scores, are the following: Student nurses were very good in performing hygiene and daily care routines ( $\bar{x}=4.55$ ), able to understand patient rights ( $\bar{x}=4.54$ ) which is only point away from the highest, maintains appropriate appearance, attire and conduct ( $\bar{x}=4.52$ ), able to provide rest and comfort measure ( $\bar{x}=4.49$ ) and lastly able to follow health and safety protocols ( $\bar{x}=4.43$ ). The overall mean score for perceived student competence is 3.74 which describes that student nurses perceived themselves good. This explains that the student nurses were able to perceive that they can perform basic skills and portray nursing behaviors as the fundamental steps in their nursing career. All the top 5 competencies belong to be the fundamental skills needed to learn and practice prior to exposure to related learning experience in Level 2. However, those skills with fair to poor mean scores are more on respiratory and gastrointestinal procedures that are

encountered on level 3 and 4, based on the curriculum or syllabus. This includes upper airway suction ( $\bar{x}$ =2.45), enema ( $\bar{x}$ =2.42), administration of blood transfusion ( $\bar{x}$ =2.33), performing tracheostomy care ( $\bar{x}$ =2.26) and performing chest tube care with underwater seal management ( $\bar{x}$ =2.19). The result of the study of Immonen et al. (2019), states that student nurses possess not only the skills necessary to provide nursing care, but also the ability to think critically, make moral decisions, and work well with others. In addition, according to Chuang et al. (2018) having adequate knowledge and performing correct and appropriate nursing skills can ensure patients safety and increase student's confidence. This is aligned with the competencies presented by the respondents as shown in the Table below.

Table 8. Distribution of Respondents according to Perceived Student Competence

<b>Nursing Behaviors and Skills Competencies</b>	<b>Mean Score</b>
Perform hygiene and daily care routines.	4.55
Understand patient rights	4.54
Maintains appropriate appearance, attire, and conduct	4.52
Provide rest and comfort measures.	4.49
Follow health and safety protocols	4.43
Adhere to the regulation of patients' and family's confidentiality	4.42
Understand and support group goals.	4.42
Apply and accept constructive criticisms	4.39
Recognize and maximize opportunity for learning	4.38
Take appropriate measures to prevent or minimize risk of injury to self	4.36
Perform and document patient health assessment.	4.19
Take appropriate measures to prevent or minimize risk of injury to patients	4.18
Adhere to ethical and legal standards of practice	4.18
Perform sterile techniques	4.15
Demonstrate cultural competence	4.14
Administer intramuscular medications	4.11
Administer any type of oral medications	4.08
Communicate verbally with precise and appropriate terminology in a timely manner with patients and families.	4.06
Communicating verbally with precise and appropriate terminology in a timely manner with healthcare professionals	4.01
Apply critical thinking to patient care	4.00
Perform subcutaneous injection including skin-testing for antibiotic	3.97
Assess nutrition and fluid balance.	3.96
Providing emotional and psychosocial support	3.95
Apply appropriate resources and measures to solve problems	3.94
Assisting activities and mobility, and changing position	3.94
Prevent patients from problem occurrence.	3.92
Answer questions for patients or families	3.92
Educate patients or families with disease-related care knowledge	3.84
Assess elimination	3.82
Charting and Documentation	3.80
Perform wound dressing care	3.74
Perform shift report using situation, background, assessment, and recommendation communication.	3.66
Develop plan of care for clients	3.64
Starting intravenous injections (IV insertion).	3.57
Administer intravenous medications	3.55
Administer IV medications (or into I.V bags)	3.46
Reconstitute IV medications to intravenous bottle/bag.	3.42
Performing postural drainage and percussion, and oxygen therapy.	3.01
Perform Nasogastric tube feeding and care	2.89
Perform venipuncture	2.83
Perform urinary tract catheter insertion and care	2.80
Perform pre-and postoperative care	2.72
Perform upper airway suction	2.45
Perform Enema	2.42
Administer blood transfusion	2.33
Perform tracheostomy care	2.26
Perform chest tube care with underwater seal management.	2.19
<b>Overall Perceived Student Competence</b>	<b>3.74</b>

Legend: Poor (1.00-2.50), Fair (2.51-3.50), Good (3.51-4.50), Very Good (4.51-5.0)

### **Level of Perceived Student Competence**

In terms of level of perceived student competence among student nurses from Level 2 to 4, the Table reflects that more than half of the respondents or 94 (59.1%) considered themselves good with the basic nursing skills and behaviors, while there are 44 out of 159 (27.7%) who are fair in competence, (8.2%) who perceived their competencies very good but there are (5%) of the respondents who perceived their competence poorly. Although there are student nurses who perceive themselves incompetent, this is a low percentage in comparison with those who are competent. Comparing the number of participants to this study with more of it coming from level 2, it is a positive outlook that from that level, student nurses are able to perceive themselves as equipped with nursing skills. Therefore, most of the student nurses from level 2 to 4 are confident that they know, both in theory and in practice, the different basic nursing skills, and behaviors.

Table 8a. Distribution of respondents according to level perceived student competence.

Level of Perceived Student Competence	f	%
<b>Poor</b>	8	5.0
<b>Fair</b>	44	27.7
<b>Good</b>	94	59.1
<b>Very Good</b>	13	8.2
<b>Total</b>	<b>159</b>	<b>100</b>

### **Relationship between Student Behavioral Engagement and Perceived Student Competence**

Table 9 shows the relationship between the student level of behavioral engagement to its level of perceived skill competence. Students with very high behavioral engagement perceived themselves good (57.1%), fair (21.4%) and poor (14.3%) of their nursing behaviors and skills. Student nurses who are with high behavioral engagement perceived themselves as good (59.8%). Also, most of the

students with moderate behavioral engagement perceived themselves good (58.3%). On the other hand, only one student with low behavioral engagement perceives that he/she is very good with skill competencies.

Using Spearman's Rho correlation to test its degree of association between the two variables, the Spearman Rho=-.063 signifies very weak negative correlation and to test the significant the p-value of .429, based on the set alpha value of 0.05, it indicates no significance between the variables. Therefore, the level of student behavioral engagement has no significant relationship with the level of perceived skill competence. Which means that how students are deeply engaged in the series of activities in school will not affect their level of competence as they perceive. But some studies found that behavioral engagement has a significant impact or relationship in obtaining higher GPA (grade weighted average) like their study behaviors (Brallier,2020). In addition, from the study of Hidayat et al. (2019) it was proven that behavioral engagement has an impact on the performance of the students. Students who exhibit poor behavior in the classroom miss out on opportunities to learn more and understand what they are studying.

Table 9. Relationship between Student Behavioral Engagement and Student Perceived Skill Competence

Student Behavioral Engagement	Student Perceived Skills Competence									
	Very Good		Good		Fair		Poor		Total	
	f	%	f	%	f	%	f	%	f	%
Very High	1	7.1	8	57.1	3	21.4	2	14.3	7	100
High	11	8.3	79	59.8	36	27.3	6	4.5	128	100
Moderate	0	0	7	58.3	5	41.7	0	0	23	100
Low	1	100	0	0	0	0	0	0	1	100
<b>Total:</b>	<b>13</b>	<b>8.2</b>	<b>94</b>	<b>59.1</b>	<b>44</b>	<b>27.7</b>	<b>8</b>	<b>5.0</b>	<b>159</b>	<b>100</b>

Spearman's rho: -.063 (Very Weak Correlation) p-Value = .429 (Not Significant)

### **Relationship between Student Cognitive Engagement and Perceived Skills Competence**

Most of the student nurses have high cognitive engagement and perceive themselves good (60.4%) with their nursing skills and behavior. But students with very high cognitive engagement are also good (63.6%) with nursing skills and behavior. Students with moderate cognitive engagement, most of them considered themselves as good (42.9%) and fair (42.9%).

Using Spearman's rho correlation to test its degree of association between the two variables, the Spearman Rho= 0.066 signifies very weak positive correlation, which means that even if both variables are increasing in response with one another there is still no strong relationship between them. To test the significance the p-value of 0.406 based on the set alpha value of 0.05 indicates no significance between the variables. Therefore, the level of student cognitive engagement has no relationship on their level of perceived skills competence. Students who are much interested in developing their knowledge and skills through classroom interaction, such as participating in a group activity are still least likely to perceive themselves competent; that they know both in theory and practice how to do the specific skills and portray behaviors toward their patients. Contrary to the study of Blumenfeld et al. (2006), students' perseverance, use of advanced learning tactics, and selection of difficult tasks are all positively impacted by their sense of competence or efficacy regarding their capacity to succeed in a certain class or on a given task.

Table 10. Relationship between Student Cognitive Engagement and Perceived Skills Competence

Student Cognitive Engagement	Student Perceived Skills Competence									
	Very Good		Good		Fair		Poor		Total	
	f	%	f	%	f	%	f	%	f	%
Very High	0	0	7	63.6	2	18.2	2	18.2	<b>11</b>	<b>100</b>
High	11	8.2	81	60.4	36	26.9	6	4.5	<b>134</b>	<b>100</b>
Moderate	2	14.3	6	42.9	6	42.9	0	0	<b>14</b>	<b>100</b>
Low	0	0	0	0	0	0	0	0	<b>0</b>	<b>0</b>
<b>Total:</b>	<b>13</b>	<b>8.2</b>	<b>94</b>	<b>59.1</b>	<b>44</b>	<b>27.7</b>	<b>8</b>	<b>5.0</b>	<b>159</b>	<b>100</b>

Spearman's rho: .066 (Very Weak Correlation)      p-Value = .406 (Not Significant)

### Relationship between Student Emotional Engagement and Student Perceived Skills Competence

Table 11 shows the students emotional engagement and its relationship to their perceived level of competence. It reflects that among 159 respondents, most of them are with high emotional engagement and considered themselves good (61.7%). Same with those who are with very high emotional engagement still perceive themselves good (54.5%). Meanwhile those who are with moderate level of emotional engagement are also perceiving themselves good (50%).

Using Spearman's Rho correlation to test its degree of association between the two variables, the Spearman Rho=0.131 signifies very weak positive correlation which means that even if both variables are increasing in response to one another, there is still no strong relationship between them. To test the significance of the computed p-value of 0.100 based on the set alpha value of 0.05 it indicates no significance between the variables. Therefore, the level of student emotional engagement has no bearing on the level of perceived skills competence. It indicates that a student's active involvement with positive attitude and enjoyment will not affect the chance of being competent to the course they are learning. Researchers found that greater emotional engagement scores predict greater accomplishment test scores for students. In fact, Gallup discovered that

reading and math scores are 6% and 8% higher in schools where the engagement measurement is only 1% over the norm (Walden University, 2023b). Research in the subject has repeatedly shown that feelings like delight, fear, confidence, helplessness, and boredom in the classroom directly affect student involvement as well as learning behaviors and accomplishments. (Mihai et al., 2022b).

Table 11. Relationship between Student Emotional Engagement and Perceived Skills Competence

Student Emotional Engagement	Student Perceived Skills Competence									
	Very Good		Good		Fair		Poor		Total	
	f	%	f	%	f	%	f	%	f	%
Very High	2	9.1	12	54.5	3	13.6	5	22.7	<b>22</b>	<b>100</b>
High	10	8.3	74	61.7	34	28.3	2	1.7	<b>120</b>	<b>100</b>
Moderate	1	6.3	8	50.0	6	37.5	1	6.3	<b>16</b>	<b>100</b>
Low	0	0	0	0	1	0	0	0	<b>1</b>	<b>100</b>
<b>Total:</b>	<b>13</b>	<b>8.2</b>	<b>94</b>	<b>59.1</b>	<b>44</b>	<b>27.7</b>	<b>8</b>	<b>5.0</b>	<b>159</b>	<b>100</b>

Spearman's rho: .131 (Very Weak Correlation)      p-Value = .100 (Not Significant)

## Chapter V

### Summary, Findings, Conclusions and Recommendations

#### Summary

This study was conducted to determine the relationship between student engagement and perceived skill competence among student nurses in a state university in Aklan, Philippines. Specifically, this study aimed to: (1) describe the socio-demographic profile of the student nurses in terms of: sex, year level, and monthly family income, (2) determine the level of engagement of the student nurses, (3) determine the perceived skills competence of student nurses; and (4) determine whether there is a significant relationship between the level student engagement and perceived skills competence.

A quantitative, descriptive-correlational design was used with a self-administered questionnaire. The questionnaires provided do not include factors that might affect the engagement and competencies of the student. The instruments for both engagement and competence were adopted with permission from the corresponding authors and have been validated by three (3) experts in the field, at the same time using Cronbach's alpha for reliability testing. The study covered student nurses from levels 2 to 4 as they have been in clinical settings. Stratified sampling was used to get the total of 159 respondents. The gathered data were then analyzed using Statistical Package for Social Sciences (SPSS version 22). The level of student engagement and perceived skills competence were tabulated using frequency distribution, percentages and mean. To test the degree of relationship between student engagement and the perceived skills competence of the student nurses, Spearman's Rho correlation coefficient was used. There is no significant relationship between student engagement and perceived skills competence ( $p=.100$ ), hence the null hypothesis was not rejected.

## Major Findings

1. The majority of the respondents were female, in year level 2 and who had a family income of more than 25,001.00.
2. The majority of the student nurses' level of engagement based on the three dimensions is: (1) student behavioral engagement is high, but there were lower rates when asking questions in class, receiving prompt feedback from the faculty on academic performance and raising hand in class, (2) student cognitive engagement is high, but there were concerns about communicating with the instructor through email, about grades or requirements, and (3) student emotional engagement is high, also with low scores in working and talking with the faculty members and tutored or taught other students either paid or voluntary.
3. The majority of the respondents perceived skills competence in nursing behaviors and skills that are categorized as good. There are skills such as upper airway suction, enema, administration of blood transfusion, performing tracheostomy care , and performing chest tube care with underwater seal management that students perceive fair to poor competence.
4. There is no significant relationship between student engagement in three aspects (behavioral, cognitive, and emotional) and perceived skills competence.

## Conclusions

The study examined the relationship between student engagement and the perceived skills competence of the student nurses in a state university in Aklan.

Based on the findings, the following conclusions were made:

1. The student nurses were female, level 2 and with a family income of more than 25,001.

2. The general level of engagement based on three dimensions (behavioral, cognitive, and emotional) was high.
3. The student nurses' perceived skills competence was good.
4. The level of student engagement has no significant relationship with the perceived skills competence of the student nurses.

### **Recommendations**

Based on the study findings the following recommendations are presented.

1. *Nurse Educators*. Nurses should develop strategies on how to strengthen communication and their partnership with the students. The nurse educators should emphasize their consultation schedule through posting it on the bulletin board, class schedule and syllabi. Reiterating that it is the nurse educator's full responsibility to expose and train student nurse. It is recommended to develop a monitoring checklist per year level of what skills they have already performed both in skills laboratory and related learning experience. This checklist will be the basis of both the clinical instructors and students of what skills or procedures they need to perform or accomplish with the specific level. It should be based on the created syllabus of the clinical instructors.
2. *School Administrators*. It is recommended, based on the result, that administrators provide support to the college of nursing especially the need to enhance the procedural skills of the student nurses prior to exposure to the Related Learning Experience (RLE) such as; a) use of high fidelity manikins to perform or practice skills in a simulation room b) prepare budget for the training and seminars of the clinical instructors especially in using technology to be able to transfer up to date knowledge and skills and c) create memorandum in private

and public hospital to cater large number of students where they can execute or perform learned skills in the classroom to real-life situations.

3. *Future Researchers.* Study the other factors that affect the competence of the student nurses to widen the scope. A more detailed instrument regarding skills competencies must be explored based on the curriculum or course syllabus. Moreover, a qualitative study may also be conducted to dig deeper on the experiences and stories of those student nurses who felt incompetent to certain procedures or skills.

## References

- Abaidoo, A. (2018, November 16). *Factors contributing to academic performance of students in a Junior High School*. GRIN. <https://www.grin.com/document/450284>
- Abunab, H., Dator, W. L. T., & Laoingco, J. R. C. (2016). Global Health Competencies of Nurse Students In Philippines. *ResearchGate*. [https://www.researchgate.net/publication/306017155\\_Global\\_Health\\_Competencies\\_Of\\_Nurse\\_Students\\_In\\_Philippines](https://www.researchgate.net/publication/306017155_Global_Health_Competencies_Of_Nurse_Students_In_Philippines)
- Adzido, R. Y. N., Dzogbede, O. E., Ahiave, E. K., & Dorkpah, O. K. (2016). Assessment of Family Income on Academic Performance of Tertiary Students: The Case of Ho Polytechnic, Ghana. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 6(3). <https://doi.org/10.6007/ijarafms/v6-i3/2221>
- Age as of Last Birthday* | *Philippine Statistics Authority*. (n.d.). <https://psa.gov.ph/content/age-last-birthday>
- Aguillon, S. M., Siegmund, G. F., Petipas, R. H., Drake, A. G., Cotner, S., & Ballen, C. J. (2020). Gender Differences in Student Participation in an Active-Learning Classroom. *CBE- Life Sciences Education*, 19(2), ar12. <https://doi.org/10.1187/cbe.19-03-0048>
- Almeida, A.B., Gaerlan, A.D. & Manly, N.E. (2016) *Research fundamentals from concept to output. A guide for researchers and thesis writers*. Adriana Publishing Co.,INC.ISBN 978-971-9656-21-0
- Amir, R., Saleha, A., Jelas, Z. M., & Ahmad, A. L. (2014). Students' Engagement by Age and Gender: A Cross-Sectional Study in Malaysia. *Middle-East Journal of Scientific Research*, 10. <https://doi.org/10.5829/idosi.mejsr.2014.21.10.85168>
- Bagheri, M. (2021). Comparative Study of the Effect of Face to Face and Computer Mediated Conversation Modalities on Student Engagement: Speaking Skill in Focus. *Asian-Pacific Journal of Second and Foreign Language Education*,6, <https://eric.ed.gov/?id=EJ1283256>
- Bagheri, M., & Mohamadi, Z. (2021). Comparative study of the effect of face-to-face and computer mediated conversation modalities on student engagement: speaking skill in focus. *Asian-Pacific Journal of Second and Foreign Language Education*, 6(1). <https://doi.org/10.1186/s40862-020-00103-0>
- Blain, K. M. (2021, October 1). *Relationship Between Student Age, Academic Performance, and NBRC Self-Assessment Exam Scores in an Accelerated Associate Degree Respiratory Care Program*. American Association for Respiratory Care. [https://rc.rcjournal.com/content/66/Suppl\\_10/3602170](https://rc.rcjournal.com/content/66/Suppl_10/3602170)
- Bond, M., Buntins, K., Bedenlier, S., Zawacki-Richter, O., & Kerres, M. (2020). Mapping research in student engagement and educational technology in higher education: a systematic evidence map. *International Journal of Educational Technology in Higher Education*, 17(1). <https://doi.org/10.1186/s41239-019-0176-8>

- Boswell, C., & Cannon, S. (2022). *Introduction to nursing research: Incorporating evidence-based practice*. Jones & Bartlett Learning.
- Briones, K.F., Dagamac, R.J.R., David, J.D., & Landerio, CA.B. (2021). Factors Affecting The Students' Scholastic Performance: A Survey Study. Sultan Kudarat State University. *Indonesian Journal of Educational Research and Technology*, 2, DOI: <http://dx.doi.org/10.17509/xxxx.xxxx>
- Bryson, C., & Hand, L. (2007). The role of engagement in inspiring teaching and learning. *Innovations in Education and Teaching International*, 44(4), 349–362. <https://doi.org/10.1080/14703290701602748>
- Canadian Institute of Health Research. (2020 April 28). *What is gender? What is sex?*. Retrieved April 28, 2023 from: <https://cihr-irsc.gc.ca/e/48642.html>
- Candelansa, A. (2022). *What is the meaning of year level? - Answers*. (n.d.). Answers. [https://www.answers.com/english-language-arts/What\\_is\\_the\\_meaning\\_of\\_year\\_level](https://www.answers.com/english-language-arts/What_is_the_meaning_of_year_level)
- Capone, V., Marino, L., & Park, M. S. (2021). Perceived Employability, Academic Commitment, and Competency of University Students During the COVID-19 Pandemic: An Exploratory Study of Student Well-Being. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.788387>
- Ćirić, M. (2022). Socio-Demographic Characteristics as Determinants of Student Engagement. Questa Soft. <https://www.ceeol.com/search/article-detail?id=1085026>
- Connelly, L.M, Pilot studies. *Medical-Surgical nursing*. 17(6), 411-2
- Covas, F. & Veiga, F. H. (2021). Student engagement in higher education, age, and parental education level. *Estudos de Psicologia (Campinas)*, 38, <https://doi.org/10.1590/1982-0275202138e200020>
- De Jesus, E. C. (2019). Senior High School Learners' Academic Engagement in Learning General Physics. <https://www.semanticscholar.org/paper/Senior-High-School-Learners%E2%80%99-Academic-Engagement-in-Jesus/d72d50052cb1dbe9ea4ed508564aae320434fa20>
- Delfino, A. P. (2019). Student Engagement and Academic Performance of Students of Partido State University. *Asian Journal of University Education*, 15, 42-55. <https://files.eric.ed.gov/fulltext/EJ1222588.pdf>
- Effects of Families Income on Students Academic Achievement*. (2014, March 12). Farzanasite. <https://farzanasite.wordpress.com/edu-696/effects-of-families-income-on-students-academic-achievement/>
- Fatou, N., & Kubiszewski, V. (2018). Are perceived school climate dimensions predictive of students' engagement? *Social Psychology of Education*, 21(2), 427–446. <https://doi.org/10.1007/s11218-017-9422-x>

- Foster, M. E., & Rahinel, R. (2008). STUDENT ENGAGEMENT AND COMPETENCY DEVELOPMENT. *Proceedings - Academy of Management*, 2008(1), 1–5. <https://doi.org/10.5465/ambpp.2008.33664597>
- Fukada, M. (2018). Nursing Competency: Definition, Structure and Development. *Yonago Acta Medica*, 61(1), 001–007. <https://doi.org/10.33160/yam.2018.03.001>
- Getie, A., Tsige, Y., Birhanie, E., Tlaye, K. G., & Demis, A. (2021). Clinical practice competencies and associated factors among graduating nursing students attending at universities in Northern Ethiopia: institution-based cross-sectional study. *BMJ Open*, 11(4), e044119. <https://doi.org/10.1136/bmjopen-2020-044119>
- Hamdan, K., & Amorri, A. (2022). The Impact of Online Learning Strategies on Students' Academic Performance. In *IntechOpen eBooks*. IntechOpen. <https://doi.org/10.5772/intechopen.94425>
- Hartono, F. P., Umamah, N., Sumarno, & Puji, R. P. N. (2019). The Level Of Student Engagement Based On Gender And Grade On History Subject Of Senior High School Students In Jember Regency. *International Journal of Scientific & Technology Research*, 8(8), 21–26. <https://www.ijstr.org/paper-references.php?ref=IJSTR-0719-20593>
- Hayes, A. (2022). Demographics: How to Collect, Analyze, and Use Demographic Data. *Investopedia*. <https://www.investopedia.com/terms/d/demographics.asp#:~:text=Demographic%20analysis%20is%20the%20study,and%20death%20rates%2C%20and%20more.>
- Howes, S., Monk-Winstanley, R., Steffon, T., & Woudhuysen, A. (2020). Poverty in the pandemic: the impact of coronavirus on low income families and children. *Child poverty action group and The church of England*.
- Imlach, A., Ward, D., Stuart, K. E., Summers, M. J., Valenzuela, M., King, A. M. P., Saunders, N. L., Summers, J. T., Srikanth, V., Robinson, A., & Vickers, J. C. (2017). Age is no barrier: predictors of academic success in older learners. *Npj Science of Learning*, 2(1). <https://doi.org/10.1038/s41539-017-0014-5>
- Jawthari, M., & Stoffa, V. (2022). Relation between Student Engagement and Demographic Characteristics in Distance Learning Using Association Rules. *Electronics*, 11(5), 724. <https://doi.org/10.3390/electronics11050724>
- Jeong, K. S. (n.d.). *A Qualitative Study of the Effects of Household Income on Students' Educational Attainment, Interpersonal Relations, and Career Goals and Transition in Korea*. Copyright ? 2012 Scientific & Academic Publishing. All Rights Reserved. <http://article.sapub.org/10.5923.j.ijas.20221201.02.html>
- Kajander-Unkuri, S., Koskinen, S., Brugnolli, A., Torre, M. C., Elonen, I., Kiele, V., Lehwaldt, D., Löyttyniemi, E., Nemcová, J., De Oliveira, C. Z., Palese, A., Rua, M., Salminen, L., Šáteková, L., Stubner, J., Sveinsdóttir, H., Visiers-Jiménez, L., & Leino-Kilpi, H. (2021). The level of competence of graduating nursing students

- in 10 European countries—Comparison between countries. *Nursing Open*, 8(3), 1048–1062. <https://doi.org/10.1002/nop2.712>
- Kajander-Unkuri, S., Meretoja, R., Katajisto, J., Saarikoski, M., Salminen, L., Suhonen, R., & Leino-Kilpi, H. (2014). Self-assessed level of competence of graduating nursing students and factors related to it. *Nurse Education Today*, 34(5), 795–801. <https://doi.org/10.1016/j.nedt.2013.08.009>
- Kiernan, L. C., & Olsen, D. M. (2020). Improving clinical competency using simulation technology. *Nursing*, 50(7), 14–19. <https://doi.org/10.1097/01.nurse.0000668448.43535.4f>
- Kim, H.J., Hong, A.J. & Song, HD. (2019). The roles of academic engagement and digital readiness in students' achievements in university e-learning environments. *Int J Educ Technol High Educ*, 2019 16, 21. <https://doi.org/10.1186/s41239-019-0152-3>
- King, R. B. (2016). Gender differences in motivation, engagement and achievement are related to students' perceptions of peer—but not of parent or teacher—attitudes toward school. *Learning and Individual Differences*, 52, 60–71. <https://doi.org/10.1016/j.lindif.2016.10.006>
- Klein, A. (2019). Student engagement handout. Stockton University, Stockton Center for Learning Design.
- Kulik, A., Lazareva, P. V., Ippolitova, N. V., Egorova, A. E., & Nedorezova, O. Y. (2020). Competency-based approach and competencies in higher education: a theoretical review. *Propósitos Y Representaciones*, 8(SPE2). <https://doi.org/10.20511/pyr2020.v8nspe2.645>
- Kupczynski, L., Brown, M., Holland, G., & Uriegas, B. (2014). The Relationship between Gender and Academic Success  
Online. <https://files.eric.ed.gov/fulltext/EJ1020184.pdf>
- Kuzminykh, L., Ghita, B., & Xiao, H. (2021). The Relationship Between Student Engagement And Academic Performance In Online Education. *5<sup>th</sup> International Conference on E-Society, E-education, and E-Technology*, (97-101), [doi.org/10.1145/3485768.3485796](https://doi.org/10.1145/3485768.3485796)
- Law Insider. (n.d). *Year level definition*. Retrieved from: <https://www.lawinsider.com/dictionary/year-level>
- Li, H., Chen, C., & Luo, L. (2024). The examination of the relationship between learning motivation and learning effectiveness: a mediation model of learning engagement. *Humanities & Social Sciences Communications*, 11(1). <https://doi.org/10.1057/s41599-024-02666-6>
- Lin, T., & Han, L. (2017). The effects of family income on children's education: An empirical analysis of CHNS data. In *International Conference on Information Technology*. <https://doi.org/10.24104/rmhe/2017.04.02002>

- Liou, S., & Cheng, C. (2013). Developing and validating the Clinical Competence Questionnaire: A self-assessment instrument for upcoming baccalaureate nursing graduates. *Journal of Nursing Education and Practice*, 4(2). <https://doi.org/10.5430/jnep.v4n2p56>
- Machebe, C. H., Ezegbe, B. N., & Onuoha, J. C. (2017). The Impact of Parental Level of Income on Students' Academic Performance in High School in Japan. *Universal Journal of Educational Research*, 5(9), 1614–1620. <https://doi.org/10.13189/ujer.2017.050919>
- Momanyi, J. O., Too, J. K., & Simiyu, C. (2015). Effect of Students' Age on Academic Motivation and Academic Performance among High School Students in Kenya. *Asian Journal of Education and e-Learning*, 3(5). <http://ajouronline.com/index.php/AJEEL/article/view/3130>
- Moneva, J. C., Miralles, R. G., & Raman, J. (2020). School Allowance and Students' Determination in Studies. *Business and Economic Research*, 10(1), 368. <https://doi.org/10.5296/ber.v10i1.16751>
- Nahar, N., Siddiqui, N., Hossain, M., Tazmeen, A., & Ali, K. (2022). Path to outcome based higher education in Bangladesh: an analysis of student engagement and socio-demographic factors. In *2022 IEEE Global Engineering Education Conference (EDUCON)*. <https://doi.org/10.1109/educon52537.2022.9766558>
- Navarro J-J., García-Rubio J., & Olivares P.R., (2015) The Relative Age Effect and Its Influence on Academic Performance. *PLoS ONE* 10(10): e0141895. [doi:10.1371/journal.pone.0141895](https://doi.org/10.1371/journal.pone.0141895)
- Nguyen, T. D., Cannata, M., & Miller, J. (2016). Understanding student behavioral engagement: Importance of student interaction with peers and teachers. *the Journal of Educational Research/Journal of Educational Research*, 111(2), 163–174. <https://doi.org/10.1080/00220671.2016.1220359>
- Örs, M. (n.d.). *Lifelong Learning Competencies among Undergraduate First Year and Final Year Midwifery-Nursing Students*. <https://eric.ed.gov/?id=EJ1245131>
- Paulsen, J., & McCormick, A. C. (2020). Reassessing Disparities in Online Learner Student Engagement in Higher Education. *Educational Researcher*, 49(1), 20–29. <https://doi.org/10.3102/0013189x19898690>
- Quigley, M. Bradley, A., Playfoot, D., & Harrad, R. (2022). Personality traits and stress perception as predictors of students' online engagement during the COVID-19 pandemic, *Personality, and Individual Differences- Science Direct*, 2022, 194, <https://doi.org/10.1016/j.paid.2022.111645>
- Ribeiro, L., Rosário, P., Núñez, J. C., González, M. L. G., & Valle, A. (2019). First-Year Students Background and Academic Achievement: The Mediating Role of Student Engagement. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.02669>
- Sahin, S. Sunal, N. & Altun, S. (2021) The Development of Nursing Competencies in Student Nurses in Turkey. *International Journal of Caring Sciences* 14 (3), 1908.

- Salubre, J. (2018). The relationship of student allowance and academic performance in lunsodaan national high school a concept paper. *www.academia.edu*.  
<https://www.academia.edu/35681480>
- Schult, J., Haag, N., Fauth, B., & Lindner, M. A. (2022). Did students learn less during the COVID-19 pandemic? Reading and mathematics competencies before and after the first pandemic wave. *School Effectiveness and School Improvement*, 33(4), 544–563. <https://doi.org/10.1080/09243453.2022.2061014>
- Sollano, A., Duhaylongsod, K.A., Aviso, M., & Moneva, J.C. (2017). Daily Allowance And Academic Performance. Jagobiao National High School-Senior High Department. *International Journal of Engineering Science and Computing*. 8 (6).  
*Student Competencies*. (n.d.). <https://education.alberta.ca/competencies/student-competencies/>
- Student nurse. (n.d.) *Medical Dictionary for the Health Professions and Nursing*. (2012). Retrieved April 19 2023 from <https://medical-dictionary.thefreedictionary.com/student+nurse>
- Tadese, M., Yeshaneh, A., & Mulu, G. B. (2022). Determinants of good academic performance among university students in Ethiopia: a cross-sectional study. *BMC Medical Education*, 22(1). <https://doi.org/10.1186/s12909-022-03461-0>
- Tsaousis, I., & Alghamdi, M. A. (2022). Examining academic performance across gender differently: Measurement invariance and latent mean differences using bias-corrected bootstrap confidence intervals. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.896638>
- University of Washington. (2023, April 4). *Engaging students in learning - Center for Teaching and Learning*. Center for Teaching and Learning. <https://teaching.washington.edu/topics/engaging-students-in-learning/>
- Wen, M., Wang, W., Wan, N., & Su, D. (2020). Family Income and Student Educational and Cognitive Outcomes in China: Exploring the Material and Psychosocial Mechanisms. *Social Sciences*, 9(12), 225. <https://doi.org/10.3390/socsci9120225>
- Wolf, A. (n.d.). *Empowering Metacognitive Learning in a Competency-Based Curriculum in Health Professions through Comprehensive Learner Record*. <https://eric.ed.gov/?id=EJ1359487>

**Appendix A**

## Transmittal Letters

July 11, 2023

**Dr. JERRY ABLE**

Faculty, College of Nursing  
Central Philippine University  
Jaro, Iloilo City

Dear Dr. Able,

Greetings!

I am a student taking up Master of Arts in Nursing major in Nursing Service Administration from Central Philippine University and I am currently conducting my thesis entitled: **Engagement and Competence among Student Nurses in a State University in Aklan.**

In line with this, we would like to seek your help for the validation of our Research Instrument. I believe that your expertise will surely make a difference in the progress of my research.

Attached herewith are the Research Objectives, Research Instrument, and Survey Instrument Validation Rating Scale.

Thank you.

Sincerely yours,

  
**MA. ELLEN N. CORTES, RN**  
Researcher

Noted:

  
**GELBERT JAN S. PORQUE, DM, MAN, RN**  
Adviser

November 15, 2023

**DR. EMILY M. ARANGOTE**  
SUC President III  
Aklan State University

Ma'am:

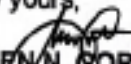
Greetings!

The undersigned is a student at Central Philippine University, Master of Arts in Nursing Major in Nursing Service Administration, currently conducting the research entitled, "Engagement and Competence among Student Nurses in a State University in Aklan."


In connection with this, the researcher would like to request your good office's permission to conduct a survey among Level 2 to Level 4 nursing students. Rest assured that ethical guidelines will be followed in the conduct of this study.

I sincerely appreciate your positive response on the matter. God bless and thank you.


Sincerely yours,


  
**MA. ELLEN N. GORTES, RN**  
Researcher

Noted:

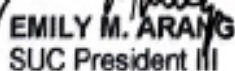
  
**GELBERT AN S. PORQUE, DMgt, RN**  
Adviser

Recommending Approval:

  
**DONNA R. LARIOS, Ed.D**  
Dean, School of Arts and Sciences

  
**MICHAEL T. IBISATE, PhD**  
Campus Director, Banga Campus

Approved:

  
**EMILY M. ARANGOTE, PhD**  
SUC President III



## Appendix B

### RESEARCH ETHICS REVIEW BOARD



**CENTRAL PHILIPPINE UNIVERSITY**  
Lopez Jaena St., Jaro, Iloilo City, Philippines  
329-1971 to 79 local 3336

### INFORMED CONSENT FORM (ICF) TEMPLATE

(VERSION No. 03-2023)

#### 1. KEY INFORMATION ABOUT THE RESEARCHERS

Title of the Study: Engagement and Competence among Student Nurses in a State University in Aklan

Name of Researcher/s: Ma. Ellen N. Cortes, RN

Research Adviser: Gelbert Jan S. Porque, DM, MAN, RN

Department/College: School of Graduate Studies-Master of Arts in Nursing

Institution: Central Philippine University

#### 2. INTRODUCTION/BACKGROUND OF THE STUDY

You are invited to take part in this research study. This form contains information that will help you in deciding whether to participate or not in this study/research. Before you decide to participate in this study, you will be given enough time to read and understand the contents of the informed consent. If there are words or concepts that you do not understand feel free to ask questions at any time, the researchers are willing to explain it to you and your questions will be answered to your satisfaction. The study will begin once you have signed the informed consent form.

This study would like to explore and identify the level of engagement and level of competence among student nurses and its relationship. The result will provide a baseline in modifying teaching strategies that is suitable for every student and will improve engagement and competence.

#### 3. PURPOSE OF THE RESEARCH

The purpose of this research study is to determine the relationship between student engagement and competence in the different nursing subjects at a state university in Aklan.

#### 4. TYPE OF RESEARCH INTERVENTION/DATA GATHERING INSTRUMENT

The researchers will use a self-administered questionnaire, checklist type with three parts will be given face to face to the respondents. They will be given enough time to answer the survey form. The researcher is present during the survey to make sure that any clarifications from the respondents will be address accordingly. **First part** consists of the demographic profile of the respondents. **Second part** is questionnaire about student engagement that is categorized as behavioral, cognitive, and emotional. **Third part** will be pertaining to the perceived skill competence of the nursing students regarding basic clinical skills using Clinical Competencies Questionnaire (CCQ), a 47-item questionnaire.

#### 5. PARTICIPANT SELECTION (INCLUSION & EXCLUSION CRITERIA)

You are chosen as a participant based on the following criteria: Bonafede student at the state university and A level 2 to level 4 student nurses that is enrolled in Academic Year 2023-2024. The following will be excluded: (1) Student nurses who are on leave of absence for any reason, (2) First year student nurses and (3) Students who are below 18 years old.

#### 6. VOLUNTARY PARTICIPATION

Your participation in this study is entirely voluntary. It is your choice whether to participate or not. If you choose not to participate or to withdraw from the study at any time, there will be no penalty or other consequences and without need to give any reason.

#### 7. PROCEDURE

You will be given by the researcher a checklist type, self-administered questionnaire. This contains three parts and will be given face to face during break time of classes. To protect privacy and anonymity, the participants are not required to write their names. The participant is expected to complete the form within 30 minutes. The researcher is available during the time of survey to make sure that any clarifications from the respondents will be address accordingly. Once the respondent has completed the form, the accomplished checklist will be then place inside the box. Thereafter, the questionnaire will be retrieved and kept for encoding and researcher has the only access of the raw data from the checklist.

#### 8. DURATION OF THE STUDY

This study will be conducted from August 2023 to January 2024.

You will be given maximum of 30 minutes to answer the given checklist-type questionnaire.

## **9. RISKS AND INCONVENIENCES**

The study will not be involving any activity that could harm you physically like testing of medicine. The study involves gaining insight of your engagement and competence therefore there is low risk involved in this study. If you are uncomfortable with the questions, you do not have to answer them. The researcher will talk to you privately and give necessary support might be psychosocial or medical. The researcher assures the respondents that this study is not part of their requirements in school, and they have the option to participate or not, without any influence on their grades.

## **10. BENEFITS**

This study might help student nurses and instructors to evaluate the current status of the student nurses engagement and competence. With that, students can find t what areas they need to improve, and instructors will design an appropriate teaching method to attain high level of engagement and competence. Furthermore, this will result to high performance when it comes to board ratings and above all the production of globally competent nurses.

## **11. REIMBURSEMENTS**

Your participation in this study will not be compensated financially or in any other way. As this study has low risks, no injury or accident is anticipated. However, in case of psychological stress, the participant will be referred to the school guidance counselor and/or psychiatrist as necessary.

## **12. CONFIDENTIALITY**

The information you have provided is solely for the purpose of this study. Your identity will be kept private and confidential to the extent provided by law. You will be assigned an ID number, and your data will be stored with utmost respect to your privacy.

## **13. RIGHT TO REFUSE OR WITHDRAW**

Your participation in this study is entirely voluntary. It is your choice whether to participate or not. If you choose not to participate or to withdraw from the study at any time, there will be no penalty or other consequences and without need to give any reason. If at any time you withdraw from the study, your data will be discarded properly.

#### **14. DECLARATION OF CONFLICT INTEREST**

The researchers declare that this study is not part of the requirements of the students in school and they have the option to participate or not, without any influence on their grades.

#### **15. STORAGE AND DISPOSAL OF RESEARCH DATA/MATERIALS**

The electronic copy of the data will be kept in a computer that only the researcher(s) has/have access to. Hard copies will be stored inside the steel cabinet in her study room that only the researcher(s) will have access to for 3 months and will be disposed after study has been completed and presented through paper shredder.

#### **16. SHARING OF RESULTS/DISSEMINATION PLAN**

The results of this study to the College of Nursing and the university. The names of the respondents will not be mentioned during any presentation and will not be included in the manuscript. Furthermore, this study will be presented in any nursing- or education-related conferences to share the results to the nurse professionals and educators in the field. The possibility of publication in a reputable journal is also explored.

As a participant, you are informed that the research findings will be shared more broadly through publications or conferences.

#### **17. WHO TO CONTACT**

If you have any questions or clarifications regarding your participation in the study, you may contact:

Lead Researcher: Ma. Ellen N. Cortes, RN

Address: Tinigao, Kalibo, Aklan

Contact Number: 09190011574

Email address: ellencortesrn@gmail.com , ma.ellen.cortes-19@cpu.edu.ph

If you have questions pertaining to your rights as a participant, you may contact:

Joy G. Raso, PhD.

Chair, CPU Research Ethics Review Board

Email: researchethics@cpu.edu.ph

Phone: 329-1971 (local 3336)

## 18. CERTIFICATE OF CONSENT

I have read the foregoing information, or it has been read and explained to me in a language/dialect I know and understand. I have had the opportunity to ask questions about it and any questions I have been asked to have been answered to my satisfaction. I consent voluntarily to be a participant in this study.

Print name of participant \_\_\_\_\_

Signature of participant \_\_\_\_\_

Date \_\_\_\_\_

MM/DD/YYYY

### Statement by the researcher/person taking consent

I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands that the following will be done.

- 1.
- 2.
- 3.
- 4.

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

Print Name of Researcher/person taking the consent \_\_\_\_\_

Signature of Researcher/ person taking the consent \_\_\_\_\_

Date: \_\_\_\_\_

MM/DD/YYYY

## Appendix C

### Questionnaires

#### Part 1. Respondent Information

Directions: Put a check (✓) mark on the box of your choice and carefully answer the questions on the space provided below.

Name: (Optional) \_\_\_\_\_

Sex:  Female  Male

Monthly Family Income: \_\_\_\_\_

Year Level:  Level 1  Level 2  Level 3  Level 4

#### Part 2. Student Engagement Questionnaire

This part contains questions about the Level of Behavioral, Cognitive and Emotional Engagement. In your experience in lectures and clinical duty (RLE) in the current academic year, how often have you done each of the following? Just create a check (✓) to your chosen answer.

Descriptive Rating	Interpretation
Always	Every meeting of lecture/clinical duty all of the behavioral, cognitive, and emotional engagement of students all are <b>practiced at all times</b> .
Often	Every meeting of lecture/clinical duty all of the behavioral, cognitive, and emotional engagement of students all are practiced <b>most of the time</b> .
Sometimes	Every meeting of lecture/clinical duty all of the behavioral, cognitive, and emotional engagement of students all are practiced <b>less frequently</b> .
Never	Every meeting of lecture/clinical duty all of the behavioral, cognitive, and emotional engagement of students all are <b>not practiced at all time</b> .

Student Engagement Items	Always	Often	Sometimes	Never
<b>BEHAVIORAL ENGAGEMENT</b>				
1. Asked questions in class or contributed to class discussion.				
2. Raising my hand in class.				
3. Participating in or small group discussions.				
4. Doing all the homework problems.				
5. Coming to class every day.				
6. Taking good notes in class.				
7. Getting a good grade.				
8. Staying up on the readings.				

<b>Student Engagement Items</b>	<b>Always</b>	<b>Often</b>	<b>Sometimes</b>	<b>Never</b>
9. Received prompt written or oral feedback from faculty on your academic performance.				
10. Come to class without completing readings or assignments				
11. Making sure to study on a regular basis.				
12. Doing well on a test.				
<b>COGNITIVE ENGAGEMENT</b>				
1. Made a class presentation				
2. Prepared two or more drafts of a paper or assignment before turning it in.				
3. Worked on a paper or project that required integrating ideas or information from previous sources.				
4. Put together ideas or concepts from different courses when completing assignments or during class discussion.				
5. Used an electronic medium (Facebook, group chat, Internet, instant messaging, etc) to discuss or complete an assignment.				
6. Discussed ideas from your readings or classes with faculty members outside of class.				
7. Putting forth effort.				
8. Used e-mail to communicate with an instructor.				
9. Discussed grades or assignments with an instructor.				
10. Work harder than you thought you could do to meet an instructor's standards or expectations.				
11. Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc)				
12. Going to the professor's office hours to review assignments or tests, or to ask questions.				
13. Thinking about the course between class meetings.				
14. Finding ways to make the course interesting to me.				

<b>Student Engagement Items</b>	<b>Always</b>	<b>Often</b>	<b>Sometimes</b>	<b>Never</b>
15. Looking over class notes between classes to make sure I understand the materials.				
16. Applying course materials to my life.				
17. Finding ways to make the course materials relevant to my life.				
<b>EMOTIONAL ENGAGEMENT</b>				
1. Included diverse perspective in class discussions or writing assignments.				
2. Worked with other students on projects or requirements during class.				
3. Worked with classmates outside to prepare class assignments or requirements such as NCP, Drug Study, Case study, Readings etc.				
4. Tutored or taught other students paid or voluntary.				
5. Participated in a community-based project as part of a regular course like involvement during seminars/trainings in the community.				
6. Had serious conversations with students who are very different from you in terms of their religious, political opinions, or personal values.				
7. Really desiring to learn the materials.				
8. Being confident that I can learn and do well in the class and RLE duties				
9. Having fun in class and during duties.				
10. Worked with faculty members on activities other than course work.				
11. Talked about career plans with a faculty member or adviser.				

Used with permission from the author, Armando P. Delfino (2018).

### **Part 3. Perceived Skills Competence**

This part contains questions about perceived skills competence as student nurses regarding basic clinical skills. 47-items questionnaires that covers both behavioral aspect and clinical skills. A Likert Scale with description is presented below. Just create a check (✓) to your chosen answer.

- (5) Know in theory, competent in practice without supervision  
 (4) Know in theory, competent in practice, need contactable sources of supervision  
 (3) Know in theory, can perform some parts in practice independently, need supervision to be readily available.  
 (2) know in theory, but not confident at all in practice  
 (1) Do not have a clue.

<b>NURSING BEHAVIORS AND SKILLS COMPETENCIES</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1. Follow health and safety protocols					
2. Take appropriate measures to prevent or minimize risk of injury to self					
3. Take appropriate measures to prevent or minimize risk of injury to patients					
4. Prevent patients from problem occurrence.					
5. Adhere to the regulation of patients' and family's confidentiality					
6. Demonstrate cultural competence					
7. Adhere to ethical and legal standards of practice					
8. Maintains appropriate appearance, attire, and conduct					
9. Understand patient rights					
10. Recognize and maximize opportunity for learning					
11. Apply appropriate resources and measures to solve problems					
12. Apply and accept constructive criticisms					
13. Apply critical thinking to patient care					
14. Communicate verbally with precise and appropriate terminology in a timely manner with patients and families.					
15. Communicating verbally with precise and appropriate terminology in a timely manner with healthcare professionals					
16. Understand and support group goals.					
17. Perform and document patient health assessment.					
18. Answer questions for patients or families					
19. Educate patients or families with disease-related care knowledge					
20. Charting and Documentation					
21. Develop plan of care for clients					
22. Perform shift report using situation, background, assessment, and recommendation communication.					
23. Perform hygiene and daily care routines.					
24. Provide rest and comfort measures.					
25. Assess nutrition and fluid balance.					
26. Assess elimination					
27. Assisting activities and mobility, and changing position					
28. Providing emotional and psychosocial support					
29. Reconstitute IV medications to intravenous bottle/bag.					
30. Administer intravenous medications					
31. Administer intramuscular medications					

<b>NURSING BEHAVIORS AND SKILLS COMPETENCIES</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
32. Perform subcutaneous injection including skin-testing for antibiotic					
33. Administer any type of oral medications					
34. Perform sterile techniques					
35. Performing postural drainage and percussion, and oxygen therapy.					
36. Perform Nasogastric tube feeding and care					
37. Perform wound dressing care					
38. Perform venipuncture					
39. Starting intravenous injections (IV insertion).					
40. Administer IV medications (or into I.V bags)					
41. Administer blood transfusion					
42. Perform urinary tract catheter insertion and care					
43. Perform pre-and postoperative care					
44. Perform Enema					
45. Perform upper airway suction					
46. Perform tracheostomy care					
47. Perform chest tube care with underwater seal management.					

**Appendix D**  
Certifications



Central Philippine University  
SCHOOL OF GRADUATE STUDIES

Master of Arts in Nursing Program

**CERTIFICATION**

This is to certify that the Questionnaire of the study entitled "Engagement and Competence among Student Nurses in a State University in Aklan" by Ma. Ellen N. Cortes has undergone instrument validation and was found to be suitable based on the research objectives and design.

This certification is issued for whatever purpose it may serve best.

Signed by:

A handwritten signature in black ink, appearing to read "Katherine C. Villaran Man".

**KATHERINE C. VILLARAN MAN, RN**  
Validator



Central Philippine University  
SCHOOL OF GRADUATE STUDIES

Master of Arts in Nursing Program

### CERTIFICATION

This is to certify that the Questionnaire of the study entitled "Engagement and Competence among Student Nurses in a State University in Aklan" by Ma. Ellen N. Cortes has undergone instrument validation and was found to be suitable based on the research objectives and design.

This certification is issued for whatever purpose it may serve best.

Signed by:

  
**CAROL JOY P. REMANESES, MHSS, RN**  
Validator



Central Philippine University  
SCHOOL OF GRADUATE STUDIES


Master of Arts in Nursing Program

### **CERTIFICATION**

This is to certify that the Questionnaire of the study entitled "Engagement and Competence among Student Nurses in a State University in Aklan" by Ma. Ellen N. Cortes has undergone instrument validation and was found to be suitable based on the research objectives and design.

This certification is issued for whatever purpose it may serve best.

Signed by:

 07/21/2023  
**JERRY ABLE, PhD**  
Validator

**APPENDIX E**

## Certificate for Adopted Instruments

April 17, 2023

**Mr. Gelbert Jan S. Porque**  
*Central Philippine University*  
*Iloilo, Philippines*

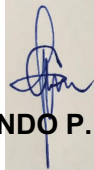
Dear Mr. Porque,

Greetings in the name of peace!


I am pleased to inform you that you are free to use my questionnaire on student engagement subject to the following conditions:

1. It must be used for your research only;
2. Please cite my paper properly;
3. A soft copy of your completed research should be sent to me through my email; and
4. The following statement must be included on all reproduced copies of the instruments (footer): Used with permission from the author, Armando P. Delfino, 2018.
5. Please send me a soft copy of the questionnaire following condition number 4.

Thank you and good luck!



**ARMANDO P. DELFINO, Ed. D.**  
*Author*

From ChingYu • chingyuus@gmail.com  
To Ma. Ellen N. CORTES • ma.ellen.cortes-19@cpu.edu.ph  
Date Jun 5, 2023, 8:57 AM  
 Standard encryption (TLS).  
View security details

Hi Ellen,

You have our permission to use the CCQ in your study. Please find the attached file for the scale and refer to the published article (<http://www.sciedu.ca/journal/index.php/jnep/article/viewFile/2862/1994>) that contains the scale. Categories of the CCQ are listed in Table 3.

Good luck with your study.  
Regards, Chingyu

-----  
Ching-Yu Cheng, Ph.D., RN  
Professor  
Chang Gung University of Science and Technology  
email: chingyuus@gmail.com

## APPENDIX F

## Certificate of Approval from Technical Experts



CENTRAL PHILIPPINE UNIVERSITY  
Jaro, Iloilo City, Philippines

SCHOOL OF GRADUATE STUDIES

**CERTIFICATE OF APPROVAL**

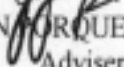
July 24, 2023

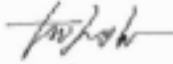
To Whom It May Concern:

This is to certify that MA. ELLEN N. CORTES, a Master of Arts in Nursing candidate, presented the research proposal last May 22, 2023, entitled "ENGAGEMENT AND COMPETENCE AMONG STUDENT NURSES IN A STATE UNIVERSITY IN AKLAN."

The panel members certify that this paper was reviewed for its technicalities.

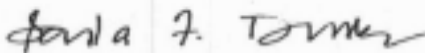
This certification is issued upon the request of MA. ELLEN N. CORTES for the CPU Research Ethics Review Board approval.


  
GELBERT JAN ROQUE, MAN, MHA, RN  
Adviser

  
TONY RAY CANAMAN, MaEd  
Panel Member

  
JOAQUIN SAPUL, JR., MAN, RN  
Outside Expert

  
HERME BORLADO, MAN, RN  
Panel Member/ Program Coordinator

  
SARLA F. DULLER, PhD, MN, RN, NP  
Chairman, Evaluation Committee

  
ROWENA M. LIBO-ON, DM  
Dean, School of Graduate Studies

**APPENDIX G**

## Certificate of Statistical Analysis

CENTRAL PHILIPPINE UNIVERSITY  
Math and Physics Department  
Jaro, Iloilo City, Philippines

**CERTIFICATION FOR STATISTICAL ANALYSIS**

April 5, 2024

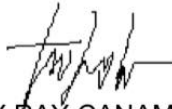
ROWENA M. LIBO-ON, DM  
Dean  
School of Graduate Studies

Dear Dr. Libo-on:

Greetings!

This is to certify that the statistical tools, presentation of analysis and interpretation of results of the thesis entitled: "**ENGAGEMENT AND COMPETENCE AMONG STUDENT NURSES IN A STATE UNIVERSITY IN AKLAN**" by **MA. ELLEN N. CORTES** has been examined.

This certification is issued for whatever purpose it may serve best.



TONY RAY CANAMAN, MAEd  
Statistician

## APPENDIX H

## RERB Ethical Clearance



**RESEARCH ETHICS REVIEW BOARD**  
CENTRAL PHILIPPINE UNIVERSITY  
Lopez Jaena St., Jaro, Iloilo City, Philippines  
329-1971 to 79 local 3336



## ETHICAL CLEARANCE

RERB Form No.22-2  
Version No.: 04  
Date of Effectivity: 17 May 2023

Date of Approval: October 17, 2023

RERB Code: 2023-295-MS-CORTES

Protocol Title: ***"ENGAGEMENT AND COMPETENCE AMONG STUDENT NURSES IN A STATE UNIVERSITY IN AKLAN"***

Version No. 02

Researcher/s: **MA. ELLEN N. CORTES**

Upon resubmission of the following documents, Research Proposal Chapters 1, 2, and 3 with references and Informed Consent Form, the above protocol is hereby **APPROVED** by the CPU-RERB. This ethical clearance is valid from **October 17, 2023** to **October 17, 2024**.

The researcher/s are hereby required to submit the following:

- ✓ Progress Report on or before **November 17, 2023** to [researchethics@cpu.edu.ph](mailto:researchethics@cpu.edu.ph)
- ✓ Final Report Form and one (1) copy of the completed protocol **within one (1) month** after completion of the study.

For any amendment or alteration in the protocol that will change the nature, or the level of risk involved after approval, the Research Ethics Review Board must be notified through writing and accomplishing the following forms as needed: Protocol Deviation Form, Serious Adverse Events, Amendment Form, and/or Early Termination Report.

Very truly yours,



  
**JOY G. RASO, PhD.**

Chair, CPU-RERB

Date: 10/17/2023

## APPENDIX I

## RERB Decision Form

 <b>RESEARCH ETHICS REVIEW BOARD</b> CENTRAL PHILIPPINE UNIVERSITY Lopez Jaena St., Jaro, Iloilo City, Philippines 329-1971 to 79 local 3336	
<b>DECISION FORM</b>	RERB Form No. 22-1 Version No. 04 Date of Effectivity: 17 May 2023

Date: September 27, 2023

NAME OF PROPONENT: **MA. ELLEN N. CORTES**

Institution: CENTRAL PHILIPPINE UNIVERSITY

Re: **"ENGAGEMENT AND COMPETENCE AMONG STUDENT NURSES IN A STATE UNIVERSITY IN AKLAN"**

RERB code: **2023-295-MS-CORTES**

Dear Mr/Ms Cortes,

This is to acknowledge receipt of your request and the following supporting documents dated **August 4, 2023**:

1. Letter of application for research ethics review addressed to CPU- RERB Chair
2. Accomplished RERB Application (Form 07-1)
3. Full protocol/Research proposal (Chapters 1, 2 and 3) with references.
4. Validated Research Instrument/Questionnaire for Quantitative Research
5. Certificate of Validation for researcher-made questionnaire preferably from (3) three experts in the field, not by the adviser and panel members
6. Informed Consent Form (CPU-RERB template)
7. Certificate of Technical Review/Approval sheet of proposal signed by (3) three members of the technical panel and the Dean
8. Turnitin Similarity Certificate from CPU-RCECC
9. Budget
10. Curriculum Vitae/Resume of the Researcher/Investigator and Co-Researchers with 2x2 photograph
11. GANTT Chart/Timelines/Table of schedule
12. Two (2) Hard Copies (Soft Bound in Blue or Black cover) of the above documents placed inside a long clear plastic envelope
13. Soft Copy of the above documents emailed to [researchethics@cpu.edu.ph](mailto:researchethics@cpu.edu.ph)

The above documents underwent **Expedited Review** which generated the following list of recommendations:

1. Revise the Ethical consideration section. It should be written after Research Instrument. The following is the content of Ethical Consideration, discuss as a sub-paragraph.
  - ✓ *Seeking approval from the RERB office and other related offices/institutions*
    - prior to the conduct of the study
  - ✓ *Risk Assessment*
    - identify research related –risk based on the following categories: negligible, low, minimal, more than minimal, and high risk) and discuss how to mitigate the identified risk.

- *This form contains the CPU-RERB recommendations. Please comply within (15) days and wait for the Ethical Clearance before the conduct of the study.*

- ~~Benefits assessment~~
  - should be summarized to make it more comprehensive to your respondents.
- ~~Withdrawal criteria of participants~~
  - state withdrawal criteria
- ~~Anonymity and confidentiality of participants/respondents~~
  - discuss how to anonymize & keep the confidentiality of your respondents
- ~~Voluntary, non-coercive recruitment of participants/respondents~~
  - provide statement on voluntary & non-coercive recruitment
- ~~Disposal of research materials/data~~
  - discuss how to dispose research materials
- ~~Contribution to local capacity building and benefits to local communities~~
  - discuss possible contribution of your study
- ~~Incentives or compensation for participants~~
  - provide statement on giving of incentives
- ~~Disclosure or declaration of potential conflict of interest~~
  - provide statement on declaration of potential conflict of interest
- 2. In the Dissemination Plan discuss the detailed plan as to how and to whom will you share the result
- Note: Content in the Ethical consideration should be aligned with ICF**
- 3. Please include 1st year students in your exclusion criteria since you mentioned about nursing students.
- 4. Provide separate section for Validity of the Questionnaire-describe the validity of the questionnaire. The questionnaire should be submitted to a panel of at least three experts for content validation.
- 5. Reliability of the Questionnaire- explain where the questionnaire was administered for pilot-testing and discuss how many participants were involved in the pilot-testing to determine its reliability. Discuss and interpret the reliability coefficient. Explain why it was considered reliable and cite your reference (Author, year of publication).
- 6. On ICF:
  - a. # 4 discuss parts of your questionnaire and give brief description
  - b. # 7 discuss the detailed procedure in the conduct of the study will you personally give the questionnaire?
  - c. # 16 discuss the detailed plan as to how and to whom will you share the result
  - d. Kindly clarify: in the protocol duration of study is Jan - Dec. 2024 while in the ICF Aug - Sept 2023.
  - e. Some portion of ICF discussion were not reflected on the protocol. Please reflect your ICF discussion in the protocol.
  - f. Please formulate discussion about provision of injury or related illness in your ICF form.
  - g. Please formulate discussion about inducement of participation or related illness in your ICF form.
  - h. Delete instructions to researchers after supplying the needed information.

**DECISION:**     Approved                       Minor revision  
                           Disapproved                       Major revision

Very truly yours,

Joy G. Raso, PhD.



Chair, CPU-RERB

Date: 9/27/23

- This form contains the CPU-RERB recommendations. Please comply within (15) days and wait for the Ethical Clearance before the conduct of the study.

## APPENDIX J

## RERB Resubmission Form

	<b>RESEARCH ETHICS REVIEW BOARD</b> CENTRAL PHILIPPINE UNIVERSITY Lopez Jaena St., Jaro, Iloilo City, Philippines 329-1971 to 79 local 3336		
	<b>RESUBMISSION FORM</b>		
	RERB Form No. 08-1 Version No. 03 Date of Effectivity: 17 May 2023		

**INSTRUCTION TO THE RESEARCHER/s:** This form shall be filled-out by the researcher upon receipt of the Decision form. Obtain an electronic copy of this form and provide the information required in the space provided. This form shall be signed by the researcher and adviser before submission to [rec-resubmission@cpu.edu.ph](mailto:rec-resubmission@cpu.edu.ph)

GENERAL INFORMATION				
Title of the Study	“ENGAGEMENT AND COMPETENCE AMONG STUDENT NURSES IN A STATE UNIVERSITY IN AKLAN”			
Version number/Date	Version No. 03/17 May 2023			
RERB Code	2023-295-MS-CORTES	Study Site:	AKLAN STATE UNIVERSITY- BANGA, AKLAN	
Name of Researcher	MA. ELLEN N. CORTES	Contact Information	Tel No.	
Co-researcher (if any)			Mobile No.	09190011574
			Fax No.	
			Email: <a href="mailto:ma.ellen.cortes-19@cpu.edu.ph">ma.ellen.cortes-19@cpu.edu.ph</a> <a href="mailto:ellencortesrn@gmail.com">ellencortesrn@gmail.com</a>	
Institution of researcher/s	AKLAN STATE UNIVERSITY			
Address of Institution	BACAN, BANGA, AKLAN			

RERB Recommendations	Response of Researcher	Section and page number of revisions
1. Revise the Ethical consideration section. It should be written after Research Instrument. The	Ethical consideration was written after Research Instrumentation.	Chapter III page. 26

<p>following is the content of Ethical Consideration, discuss as a sub-paragraph.</p> <ul style="list-style-type: none"> <li>a. <i>Seeking approval from the RERB office and other related offices/institutions</i> – prior to the conduct of the study.</li> <li>b. <i>Risk Assessment</i>-identify research related-risk based on the following categories: negligible, low, minimal, more than minimal, and high risk and discuss how to mitigate the identified risk.</li> <li>c. <i>Benefits assessment</i> – should be summarized to make it more comprehensive to your respondents.</li> <li>d. <i>Withdrawal criteria of participants</i> -state withdrawal criteria</li> <li>e. <i>Anonymity and confidentiality of participants /respondents</i>-discuss how to anonymize &amp; keep the confidentiality of your respondents.</li> <li>f. <i>Voluntary, non-coercive recruitment of participants/respondents</i>-provide statement on voluntary &amp; non-coercive recruitment.</li> <li>g. <i>Disposal of Research materials/data</i> – discuss possible contribution</li> <li>h. <i>Contribution to local capacity building and benefits to local communities</i> – discuss possible contribution of your study</li> <li>i. <i>Incentives or compensation for participants</i> – provide statement on giving incentives</li> <li>j. <i>Disclosure or declaration of potential conflict of interest</i>-provide statement on declaration of potential conflict of interest</li> </ul>	<ul style="list-style-type: none"> <li>a. The study will be submitted to the CPU-Research Ethics Review Board for ethical review and approval to conduct the study. Also, the protocol will undergo approval from the technical experts.</li> <li>b. <i>Risk Assessment</i>. The study will not be involving any activity that could harm you physically like testing of medicine. The study involves gaining insight of your engagement and competency therefore there is low risk involved in this study. If you are uncomfortable with the questions you do not have to answer them. The researcher will talk to you privately and give necessary support might be psychosocial or medical. The researcher assures the respondents that this study is not part of their requirements in school and they have the option to participate or not, without any influence on their grades.</li> <li>c. <i>Benefits Assessment</i>. This study will be student nurses and instructors to evaluate the current status of the student nurses engagement and competence. With that, students can identify what areas they need to improve and instructors will design an appropriate teaching method to attain high level of engagement and competence. Furthermore, this will result to high performance when it comes to board ratings and above all the production of globally competent nurses.</li> <li>d. <i>Withdrawal Criteria of participants</i>. The researcher will strictly observe the right to self-determination or the ethical principle of self-respect. The researcher will respect the participants' decision to quit while participating in or completing the research study. It is their choice whether to participate or not. If they choose not to participate or</li> </ul>	<ul style="list-style-type: none"> <li>a. Chapter III page. 26</li> <li>b. Chapter III page. 26</li> <li>c. Chapter III page. 26</li> <li>d. Chapter III page. 27</li> </ul>
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	<p>to withdraw from the study at any time, there will be no penalty or other consequences and without need to give any reason. If at any time respondents withdraw from the study, your data will be discarded properly.</p> <p>e. <i>Anonymity and confidentiality of participants/respondents.</i> Confidentiality is the process of protecting the study participant so that no personal information and study responses provided will be divulged publicly and will be identified with him/her (Venzon and Venzon, 2010). This will be achieved by keeping the participants personal information hidden during the conduct of the study. Coding or an ID number can be done or assigned by the researcher instead of writing the full name of the respondents for anonymity during tabulation of gathered data. Proper storage and disposal of data will be a major task of the researcher to ensure confidentiality. Data will be kept confidential until the research is completed. Raw data will be deleted from the record after the result is disseminated in a public forum.</p> <p>f. <i>Voluntary, non-coercive recruitment of participants/respondents.</i> Respondents participation is totally voluntary. An informed consent will be acquired. After obtaining and comprehending all relevant information, a competent potential participant decides to participate in research without the use of coercion, undue influence, or enticement (National Ethical Guidelines for Health and Health-Related Research, 2017). The researcher will provide a detailed explanation to the participants of the purpose of the study in full veracity. The researcher will make sure the potential participant has</p>	<p>e. Chapter III page. 26</p> <p>f. Chapter III page. 27</p>
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	<p>understood the material completely. Each person will have a full opportunity to ask questions, and the researcher will honestly, quickly, and totally respond to each one. Moreover, the researcher is working as a faculty of the university where the study will be conducted. It will be emphasized in the informed consent that this study is not part of the requirements of the students in school and they have the option to participate or not, without any influence on their grades.</p> <p>g. <i>Disposal of research materials/data.</i> The electronic copy of the data will be kept in a computer that only the researcher(s) has/have access to. Hard copies will be stored inside the steel cabinet in her study room that only the researcher(s) will have access to for 3 months and will be disposed after study has been completed and presented through paper shredder.</p> <p>h. <i>Contribution to local capacity building and benefits to local communities.</i> The result of the study will be beneficial in the nursing community especially those who are in academe. The clinical instructors as the facilitators of student nurses in gaining necessary knowledge and skills for their nursing career, the result will provide framework in teaching according to the engagement level or status of the students. With that, the community can benefit from producing highly competent, compassionate and caring future nurses.</p> <p>i. <i>Incentives or compensation for participants.</i> The respondents will not receive any compensation or money in participating in this study. But, in the case of gaining</p>	<p>g. Chapter III page. 28</p> <p>h. Chapter III page. 28</p>
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	<p>injury or accident happens during the survey the researcher will shoulder all the cost from transportation to medical treatment.</p> <p>j. <i>Disclosure or declaration of potential conflict of interest.</i> The researchers declare that this study is not part of the requirements of the students in school and they have the option to participate or not, without any influence on their grades.</p>	<p>i. Chapter III page. 28</p> <p>j. Chapter III page. 28</p>
<p>2. In the Dissemination Plan discuss the detailed plan as to how and to whom will you share the result. Note: Content in the Ethical consideration should be aligned with ICF.</p>	<p>After the conduct of this study, the protocol will be presented to the panel of examiners by the School of Graduate Studies. A copy of the protocol will be provided to the CPU-Research Ethics Review Board as required.</p> <p>Results of this study will be shared with the College of Nursing and the university. The names of the respondents will not be mentioned during any presentation and will not be included in the manuscript. Furthermore, this study will be presented in any nursing- or education-related conferences to share the results to the nurse professionals and educators in the field. The possibility of publication in a reputable journal is also explored.</p>	<p>Chapter III page 30</p>
<p>3. Please include 1<sup>st</sup> year students in your exclusion criteria since you mentioned</p>	<p><b>Exclusion Criteria.</b> The following student nurses will be excluded from this study, (1) nursing students who are on leave of</p>	<p>Chapter III. Study Participants page 23</p>

about student nurses.	absence for any reason, (2) First year student nurses and (3) students who are below 18 years old.	
<p>4. Provide separate section for Validity of the Questionnaire- describe the validity of the questionnaire. The questionnaire should be submitted to a panel of at least three experts for content validation.</p>	<p>For validity of the instrument, the opinion of three (3) experts in the fields of research and education will be consulted and any suggestions will be incorporated respectively. The experts will be chosen based on the criterion that includes; (1) a registered nurse working as clinical instructors, (2) with expertise in the field of research in academe or practitioners in nursing and (3) Doctor in Philosophy or Masters Degree as the highest educational attainment. The researcher will use the survey instrument validation rating scale by Good and Scates (1972) to give unified rubrics to assess if the researchers instrument items are congruent to the objectives of the study (Oducado, R. 2020).</p> <p>With certificate of validation from 3 experts.</p>	<p>Chapter III. Under Research Instrumentation page 25</p> <p>Appendix D page 54</p>
<p>5. Reliability of the Questionnaire – explain where the questionnaire was administered for pilot-testing and discuss how many participants were involved. Discuss and interpret the reliability coefficient. Explain why it was considered reliable and cite your reference (Author, year publication).</p>	<p>For reliability testing, Cronbach's Alpha was used, this is to test the consistency of a set of items or how closely related they are as a group. The acceptable reliability coefficient is 0.70 or higher in most social science research (UCLA Statistical Methods and Analytics, 2021). The Clinical Competencies Questionnaire (CCQ) is with reliability coefficient of .98 based on Liou and Cheng (2013). Validity of the known-groups and the content was confirmed. Four components of competence were identified by principal component analysis, which provided a high level of explanation for competence: nursing professional behaviors, core nursing skills, general performance, and advanced nursing</p>	<p>Chapter III. Under Research Instrumentation page 25</p>

	<p>abilities Liou and Cheng (2013b). A pilot test will be conducted among 10% or 16 of the total number of respondents who are not part of the study (Connelly, 2008). The pilot testing will be done to other college of nursing in the province of Aklan.</p>	
<p>6. On ICF:</p> <ol style="list-style-type: none"> <li>a. #4 discuss parts of your questionnaire and give brief description</li> <li>b. #7 discuss the detailed procedure in the conduct of the study will you personally give the questionnaire?</li> <li>c. #16 discuss the detailed plan as to how and to whom will you share the result.</li> <li>d. Kindly clarify: in the protocol duration of the study is Jan – Dec 2024 while the ICF Aug-Sept 2023.</li> <li>e. Some portion of ICF discussion were not reflected on the protocol. Please reflect your ICF discussion in the protocol.</li> <li>f. Please formulate discussion about provision of injury or related illness in your ICF.</li> <li>g. Please formulate discussion about inducement of participation or related illness in your ICF.</li> <li>h. Delete Instructions to researchers after supplying the needed information.</li> </ol>	<ol style="list-style-type: none"> <li>a. The researchers will use a self-administered questionnaire, checklist type with three parts will be given face to face to the respondents. They will be given enough time to answer the survey form. The researcher is present during the survey to make sure that any clarifications from the respondents will be address accordingly. <b>First part</b>, consists of the demographic profile of the respondents. <b>Second part</b>, is questionnaire about student engagement that is categorized as behavioral, cognitive and emotional. <b>Third part</b> will be pertaining to the perceived competency of the student nurses regarding basic clinical skills using Clinical Competencies Questionnaire (CCQ), a 47-item questionnaire.</li> <li>b. You will be given by the researcher a checklist type, self-administered questionnaire. This contains three parts and will be given face to face during break time of classes. To protect privacy and anonymity, the participants are not required to write their names. The participant is expected to complete the form within 30 minutes. The researcher is available during the time of survey to make sure that any</li> </ol>	<p>ICF #4 page 44</p> <p>ICF #7 page 44</p>

	<p>clarifications from the respondents will be address accordingly. Once the respondent has completed the form, the accomplished checklist will be then place inside the box. Thereafter, the questionnaire will be retrieved and kept for encoding and researcher has the only access of the raw data from the checklist.</p> <p>c. The results of this study to the College of Nursing and the university. The names of the respondents will not be mentioned during any presentation and will not be included in the manuscript. Furthermore, this study will be presented in any nursing- or education- related conferences to share the results to the nurse professionals and educators in the field. The possibility of publication in a reputable journal is also explored.As a participant, you are informed that the research findings will be shared more broadly through publications or conferences.</p> <p>d. This study will be conducted from August 2023 to January 2024.</p> <p>e. The ICF discussion is now synchronized with the discussion in the protocol.</p> <p>f. The study will not be involving any activity that could harm you physically like testing of medicine. The study involves gaining insight of your engagement and competency therefore there is low risk involved in this study. If you are</p>	<p>ICF #16 page 46</p> <p>ICF #8 page 44</p>
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	<p>uncomfortable with the questions you do not have to answer them. The researcher will talk to you privately and give necessary support might be psychosocial or medical. The researcher assures the respondents that this study is not part of their requirements in school and they have the option to participate or not, without any influence on their grades.</p> <p>g. As this study has minimal risks, no injury or accident is anticipated. However, in case of psychological stress, the participant will be referred to the school guidance counselor and/or psychiatrist as necessary.</p> <p>h. The instruction for researcher has been deleted.</p>	<p>ICF</p> <p>ICF #9 page 45</p> <p>ICF #11 page 45</p>
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**Researcher/s:**

  
MA. ELLEN N. CORTES, RN

Signature over Printed Name

Date: October 7, 2023

**Adviser:**



  
GELBERT JAN S. FORQUE, DM, MAN, RN

Signature over Printed Name

Date: October 10, 2023

## APPENDIX K

## RERB Progress Report Form

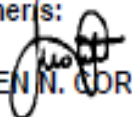

	<b>RESEARCH ETHICS REVIEW BOARD</b> CENTRAL PHILIPPINE UNIVERSITY Lopez Jaena St., Jaro, Iloilo City, Philippines 329-1971 to 79 local 3336	
<b>PROTOCOL REVIEW OF PROGRESS REPORT</b>	RERB Form No. 09-1	
	Version No. 01	
	Date of Effectivity: 17 May 2023	

**INSTRUCTIONS TO THE RESEARCHER/s:**

*This form is required thirty (30) days after your Data Collection. Obtain an electronic copy of this form and supply All information required in the space provided. This form shall be signed by the researcher and adviser before submission to [researchethics@cpu.edu.ph](mailto:researchethics@cpu.edu.ph)*



GENERAL INFORMATION			
Title of Study	ENGAGEMENT AND COMPETENCE AMONG STUDENT NURSES IN A STATE UNIVERSITY IN AKLAN		
RERB Protocol No.	2023-295-MS-CORTES	Study Site	Bacan, Banga, Aklan
Name of Researcher	Ma. Ellen N. Cortes		
Contact No.	09190011574	Email Address	<a href="mailto:ma.ellen.cortes-19@cpu.edu.ph">ma.ellen.cortes-19@cpu.edu.ph</a> <a href="mailto:allencortesrn@gmail.com">allencortesrn@gmail.com</a>
Co-researcher (if any)			
Institution	Aklan State University		
Address of Institution	Bacan, Banga, Aklan		
Ethical clearance effectivity period:	October 17, 2023 – October 17, 2024		
PROGRESS REPORT			

1. Start of study: August 1, 2023
2. Expected end of study: May 31, 2024
3. Number of enrolled participants: 159
4. Number of required participants: 159
5. Number of participants who withdrew: 0
6. Deviations from the approved protocol: No deviations made from approved protocol
7. New Information (literature or in the conduct of the study) that may significantly change the risk-benefit ratio: None.
8. Issues/problems encountered: Pending approval of letter for pre-testing and availability of

Recommendations (For RERB use only)	
DECISION: (For RERB use only)	<input type="checkbox"/> Ask for further information <input type="checkbox"/> Noted and Accept report
Comments of Primary Reviewer (For RERB use only)	
RERB Primary Reviewer: (For RERB use only)	
<hr/> Signature over Printed Name Date: Researcher(s):  MA. ELLEN N. CORTES, RN	
<hr/> Signature Over Printed Name Date: January 23, 2024	
Adviser:  GELBERT JAN S. PORQUE, DM, MAN, RN	
<hr/> Signature Over Printed Name Date: February 05, 2024	

## APPENDIX L

## RERB Final Report Form

	<b>RESEARCH ETHICS REVIEW BOARD</b> CENTRAL PHILIPPINE UNIVERSITY Lopez Jaena St., Jaro, Iloilo City, Philippines 329-1971 to 79 local 3336	
<b>FINAL REPORT FORM</b>		RERB Form No. 13-1
		Version No. 01
		Date of Effectivity: 17 May 2023

<b>GENERAL INFORMATION</b>
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RERB Protocol Number	2023-295-MS-CORTES	Date (DD/MM/YYYY)	24/04/2024
Protocol Title	ENGAGEMENT AND COMPETENCE AMONG STUDENT NURSES IN A STATE UNIVERSITY IN AKLAN		
Principal Investigator/s	Ma. Ellen N. Cortes		
Department/College	Graduate Studies Master of Arts in Nursing		
Contact No.	09190011574	*Email Address	<a href="mailto:ma.ellen.cortes-19@cpu.edu.ph">ma.ellen.cortes-19@cpu.edu.ph</a>
Co-investigator/s (if any)			
Contact No.		Email Address	
Institution of Researcher/s	Aklan State University – Banga Campus		
Address of Institution	Bacan, Banga, Aklan		
Effective period of Ethical Clearance	From: October 17, 2023		To: October 17, 2024
(*for RERB) Primary Reviewer/s			
Type of Study	<input type="checkbox"/> Clinical <input type="checkbox"/> Epidemiology <input type="checkbox"/> Observational study <input type="checkbox"/> Document Review <input type="checkbox"/> Individual based <input type="checkbox"/> Genetic <input checked="" type="checkbox"/> Social Survey <input type="checkbox"/> Others, specify _____		
Review Status	<input type="checkbox"/> Full Board <input checked="" type="checkbox"/> Expedited		

1. Start/end of the Study: August 1, 2023 to May 31, 2024
2. Number of enrolled participants: 159
3. Number of required participants: 159
4. Number of participants who withdraw: 0
5. Deviations from the approved protocol: No deviations made from approved protocol
6. Issues/problems encountered: Pending approval of letter for pre-testing and availability of the respondents during holiday break.
<p>7. Summary of findings:</p> <p>The findings revealed that female student nurses, in year level 2, and who had a family income of more than 25,001.00 had a high overall level of student engagement based on the three (3) aspects, (behavioral, emotional and cognitive) but some were factors needed augmentation, like communicating and collaborating with instructors. The perceived competence was good, but fair to poor in skills related to respiratory and gastrointestinal. Therefore, it was concluded that the level of engagement has no correlation to the perceived competence of the student nurses.</p>
<p>8. Conclusions/Recommendations:</p> <p>The study examined the relationship between student engagement and perceived competence of the student nurses in a state university in Aklan.</p> <p>Based on the given findings, the following conclusions were made:</p> <ol style="list-style-type: none"> <li>1. The student nurses were female, level 2 and with a family income of more than 25,001.</li> <li>2. The general level of engagement based on three dimensions (behavioral, cognitive and emotional) were high.</li> <li>3. The student nurses' perceived competence was good.</li> <li>4. The level of student engagement has no influence on the perceived competence of the student nurses.</li> </ol> <p><i>Recommendations</i></p> <p>After systematic review with the previous findings and conclusions of the study, the following recommendations are presented.</p> <ol style="list-style-type: none"> <li>1. <i>Nurse Educators.</i> The findings showed high engagement of the student but there were areas for consideration, as it has the lowest engagement rate and it involved interaction or communication with the nurse educators. It is therefore recommended that nurse educators develop strategies on how to strengthen communication and their partnership with the students. The nurse educators should emphasize their consultation schedule through posting it on the bulletin board, class schedule and syllabi. The student competence level was good, though there were skills which they could not perform well, such as procedures related to respiratory and gastrointestinal, that must be undergone in levels 3-4. This could be due to the limited exposure due to the pandemic. Reiterating that it is the nurse educator's full responsibility to expose and train student nurses. The researcher recommends developing a monitoring checklist per year level of what skills they have already performed both in skills laboratory and related learning experience. This checklist will be the basis of both the</li> </ol>


clinical instructors and students of what skills or procedures they need to perform or accomplish with the specific level. It should be based on the created syllabus of the clinical instructors.

2. *School Administrators.* It is recommended, based on the result, that administrators provide support to the college of nursing especially the need to enhance the procedural skills of the student nurses prior to exposure to the Related Learning Experience (RLE) such as; a) use of high fidelity manikins to perform or practice skills in a simulation room b) prepare budget for the training and seminars of the clinical instructors especially in using technology to be able to transfer up to date knowledge and skills and c) create memorandum in private and public hospital to cater large number of students where they can execute or perform learned skills in the classroom to real-life situations.
3. *Future Researchers.* The result of the study would like to recommend the future researcher to study the other factors that affect the competence of the student nurses to widen the scope. A more detailed instrument regarding skills competencies must be explored based on the curriculum or course syllabus. Moreover, a qualitative study may also be conducted to dig deeper on the experiences and stories of those student nurses who felt incompetent to certain procedures or skills.

4. Actions for dissemination of study results:

Results of this study will be shared with the College of Nursing and the university. The names of the respondents were not mentioned during any presentation and were not included in the manuscript. Furthermore, this study will be presented in any nursing- or education- related conferences to share the results to the nurse professionals and educators in the field. The possibility of publication in a reputable journal is also explored.

Researcher/s:

  
**MA. ELLEN N. CORTES, RN**  
 Signature Over Printed Name

Date: April 24, 2024

Adviser:

  
**GELBERT S. PORQUE, DM, MAN, RN**  
 Signature Over Printed Name

Date: April 25, 2024

**APPENDIX M**

## Plagiarism Scan Certificate

**REVIEW, CONTINUING EDUCATION and CONSULTANCY CENTER**Central Philippine University  
Jaro, Iloilo CityTel. No. 329-1971 local 1008 email: [rceccsec@cpu.edu.ph](mailto:rceccsec@cpu.edu.ph)Website: [rcecc.cpu.edu.ph](http://rcecc.cpu.edu.ph)

July 18, 2023

**CERTIFICATION**

This is to certify that the paper entitled **“ENGAGEMENT AND COMPETENCE AMONG STUDENT NURSES IN A STATE UNIVERSITY IN AKLAN”** by **Ma. Ellen N. Cortes** has undergone Turnitin Similarity Checking with a passing percentage of 6% and have passed the requirements (Chapter 1-3).

Prepared by:

Handwritten signature of Pinky E. Lutero-Tongol.

**PINKY E. LUTERO-TONGOL**

Staff -in-charged

Approved by:

Handwritten signature of Lenny Rose P. Mucho.

**LENNY ROSE P. MUCHO, EdD.**

Director, RCECC

**APPENDIX N**

## Certification for Grammar and Style




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**CERTIFICATION**

This is to certify that the Thesis entitled “**ENGAGEMENT AND COMPETENCE AMONG STUDENT NURSES IN A STATE UNIVERSITY IN AKLAN**” by **MA ELLENN CORTES**, was checked for grammar, style, and other mechanics of writing.

Issued this 24<sup>th</sup> day of April 2024.

  
Clarece P Benjamin  
Faculty Member

## APPENDIX O

### Survey Instrument Validation Rating Scale

**Instruction:** Please indicate your degree of agreement or disagreement on the statements provided below by encircling the number which corresponds to your best to your judgment.

**1** – Strongly Disagree    **2** – Disagree    **3** – Undecided    **4** – Agree    **5** – Strongly Agree

#### Criteria

The items in the instrument are relevant to answer the objectives of the study.	1	2	3	4	5
The items in the instrument can obtain depth to constructs being measured.	1	2	3	4	5
The instrument has an appropriate sample of items for the construct being measured.	1	2	3	4	5
The items and their alternatives are neither too narrow nor limited in its content.	1	2	3	4	5
The items in the instrument are stated clearly.	1	2	3	4	5
The items on the instrument can elicit responses which are stable, definite, consistent, and not conflicting.	1	2	3	4	5
The terms adapted in the scale in the scale are culturally appropriate.	1	2	3	4	5
The layout or format of the instrument is technically sound.	1	2	3	4	5
The responses on the scale show a reasonable range of variation.	1	2	3	4	5
The instrument is not too short or long enough that the participants will be able to answer it within a given time.	1	2	3	4	5
The instrument is interesting such that participants will be induced to respond to it and accomplish it fully.	1	2	3	4	5
The instrument as a whole could answer the basic purpose for which it is designed.	1	2	3	4	5
The instrument is culturally acceptable when administered in the local setting.	1	2	3	4	5

#### Comments and Suggestions:

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\_\_\_\_\_  
Signature over Printed Name

## APPENDIX P

### Curriculum Vitae



# MA. ELLEN N. CORTES

School of Graduate Studies  
Master of Arts in Nursing-NSA

#### PROFILE

A registered nurse for 7 years and currently working as a clinical instructor for almost 5 years. I have the interest in working with research and community-extension.

#### CONTACT

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09190011574

EMAIL:  
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[elencortesn@gmail.com](mailto:elencortesn@gmail.com)

ADDRESS:  
Tinigao, Kalibo, Aklan  
Philippines  
5600

#### EDUCATION

**Aklan State University- Banga Campus**  
2012 - 2016  
Bacan, Banga, Aklan

**Infant Jesus School**  
2008 - 2012  
C. Quimpo St. Kalibo, Aklan

#### WORK EXPERIENCE

**Aklan State University - Classroom/Clinical Instructor**  
November 6, 2018 – Current  
Part-Time (Contract of Service)

**Ibajay District Hospital – Emergency Room Nurses**  
August 4, 2022 to July 4, 2023  
Full Time (Contract of Service)

**Panay Healthcare MPC Hospital -Staff Nurse**  
May 17, 2017 – August 1, 2019  
Full-Time (Regular)

#### SKILLS

- Good communication skills
- Ability to collaborate effectively with healthcare providers and other team members
- Computer literate (Word, Excel, Powerpoint)
- Nursing Procedures

#### ACTIVITIES

An active member of Philippine Nurses Association and participated in different community extension activity in the university. Attended series of seminars and training for continuing education.

**APPENDIX Q**  
Gantt Chart

Activities	2022	2023										2024				
	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	
Identifying Research Title																
Review of Related Literature and Studies																
Title Matrix Submission																
Research Title Presentation																
Preparation of Thesis Proposal																
Presentation of Thesis Proposal																
Revisions of Thesis Proposal																
Preparation and Submission of Thesis Proposal																
Ethics Review Submission																
Data Collection																
Data Analysis																
Report Writing																
Submission of Thesis																
Presentation of Thesis																