Clinical Instructor Behavior and Student Engagement of Nursing Students in A Catholic Higher Educational Institution

ABSTRACT

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| **Background:** The engagement of the faculty to teach the students could be affected by too much workload, fatigue, and/or burnout. Although the college is experiencing growth driven by the demand, this growth simultaneously puts pressure on the faculty, who are crucial for delivering quality education and fostering the engagement necessary to produce competent and empowered nurses.**Aim:** This study aimed to assess clinical instructor behavior and student engagement among Level 3 and 4 nursing students at a Catholic higher educational institution.**Study design:** This study utilized descriptive, comparative, and correlational research designs.**Place and Duration of Study:** This was conducted at the Nursing Department of a Catholic higher educational institution during the academic year 2024-2025. **Methodology:** This study employed descriptive, comparative, and correlational research designs to assess the extent of clinical instructor behavior and nursing student engagement among Level 3 and 4 students, the significant differences existed in student engagement based on these groupings, and the relationship between instructor behaviour and student engagement. **Results:** The clinical instructor behavior was rated very great as a whole, and when the BS Nursing students were grouped according to sex and year level in the areas of clinical experience, teaching skills, clinical competency, and professional acceptability. Meanwhile, the degree of student engagement, in all its domains such as meaningful process, participation, and focused attention, is very high. There is no significant difference in the degree of student engagement when students are grouped according to sex and year level. Finally, there is a significant positive correlation between student engagement and instructor behavior.**Conclusion:** This study strongly concludes that Bachelor of Science in Nursing students hold highly positive perceptions of their clinical learning environment and engagement. Positive perceptions of clinical instructor behavior (clinical experience, teaching skills, competency) are consistent across genders and year levels, indicating a robust program with well-regarded instructors and valuable experiences. Student engagement is also very high across gender and year level, suggesting an environment that effectively captures and maintains student interest. Overall, the findings depict a highly successful BS Nursing clinical education component where excellent instruction and opportunities drive high student engagement across all demographics. |

*Keywords: Clinical instructor behavior, student engagement, Catholic higher educational institution, clinical teaching*

1. INTRODUCTION

“Clinical experience is essential to nursing as an applied discipline. It is internationally agreed that clinical nursing education plays a vital role in acquiring the fundamental nursing competencies required for professional practice. Instructors are the most significant individuals who help students acquire the necessary caring skills in a clinical setting; they devote their time to guiding small groups of students in specific clinical settings, ensuring they achieve learning objectives” (Shudifat et al., 2024). “Clinical instructors make a valuable contribution to the students’ learning process as they enhance students' learning by creating a positive learning environment and participating as role models” (Abusalah et al., 2019). “Clinical instructors supervise the student trainees' clinical activities and report all activities in their classroom afterwards. Hence, this will entail them being prepared with the current development of nursing issues in specialised disciplines and the latest trends in the clinical environment” (Macroy et al., 2020). “Clinical instructors serve as a teachers, a researcher, supervisors, a nurse, and a mentor, organize the debriefing process, and execute professional behavior, rating the activities as guides and role models, thereby creating a sound atmosphere for their clinical trainees to learn and consider” (Zhao et al., 2018). “Caring is an integral part of the nursing profession. The standards that guide nurses when caring for patients are the professional values which are learned throughout the career. In this process of learning, clinical instructors might play an important role since they have been identified as powerful role models for their students” (Domínguez-Martís et al., 2025).

“Clinical teaching is a core component of nursing education. The clinical teachers’ roles and responsibilities are to supervise clinical activities and empower students to gain clinical competency and skills. The nursing students’ perspective of effective clinical teachers’ behavior is an important indicator of facilitating and improving clinical education quality” (Macroy et al., 2020). “Nursing educators unselfishly build working relationships with their peers, staff nurses, and preceptors, where the nurse educators initiate collaboration with the health care professionals. They encourage the students to concentrate on the course material and develop what they have learned through a presentation of unique viewpoints” (Xu, 2023). “Effective clinical instructors demonstrate commitment, internal motivation, problem solving skills, flexibility and creativity, time management, leadership and management, accessibility, lifelong learning, morality, and up-to-date knowledge and skills [7]. Research suggests that the clinical instructors’ characteristics such as teaching ability, behaviour, and character affect students’ learning” (Jasemi et al., 2018).

In the Philippines, the Commission on Higher Education or CHED (CMO No. 15, Series of 2017) sets the qualifications for nursing faculty, including clinical instructors. It also mandates a specific student-to-instructor ratio for clinical rotations. This ensures qualified instructors are present and student learning is not diluted due to excessive numbers. In addition, CHED Memorandum Order No. 52, Series of 2017 outlines the curriculum and learning outcomes for Bachelor of Science in Nursing programs and emphasises the importance of integrating theory with clinical practice. This indirectly promotes a strong relationship between instructors guiding students during clinical rotations, ensuring theoretical knowledge is applied effectively (Commission on Higher Education [CHED], 2017).

Based on records from the Registrar’s Office, the College of Nursing of the Catholic Higher Education Institution is experiencing growth in its enrollment population. As the nursing shortage sets a drawback in the healthcare industry and nursing schools (Appiah, 2020), effective engagement fostered by qualified instructors, supportive environments, and focused care to develop and empower students is an issue. The engagement of the faculty to teach the students could be affected by too much workload, fatigue, and/or burnout. Although the college is experiencing growth driven by the demand, this growth simultaneously puts pressure on the faculty, who are crucial for delivering quality education and fostering the engagement necessary to produce competent and empowered nurses. Guided by love and grounded in science, the journey of nursing students at the college is centred on developing their competence and nurturing their capacity for compassion, qualities essential for the future of healthcare. This propelled the researcher to conduct this study.

Several studies have been conducted relevant to the subject matter of the proposed study. However, of the studies reviewed, there is a dearth of studies on the correlation between clinical instructors’ behavior and nursing students’ engagement, specifically in the locale of this study. This is the gap that this study intended to address.

This study was conducted to address the identified gap and to assess the extent of clinical instructor behavior and degree of student engagement as assessed by Level 3 and 4 nursing students of a Catholic higher educational institution. Findings of the study were utilized to design an enhanced clinical instructor training program geared toward the improved engagement of students both in the classroom and clinical settings.

2. methodology

This study employed descriptive, comparative, and correlational research designs. The descriptive aspect assessed the extent of clinical instructor behavior and nursing student engagement among Level 3 and 4 students, both overall and when grouped by sex and academic status. The comparative design determined if significant differences existed in student engagement based on these groupings. The correlational design explored the relationship between instructor behavior and student engagement. Respondents were 215 Level 3 and 4 nursing students from a Catholic higher education institution in Bacolod City during the first semester of the 2024-2025 academic year, selected via stratified random sampling from a population of 485. A researcher-made survey with high validity (4.33) and reliability (0.983) collected data on demographics, instructor behavior, and student engagement. Data analysis included descriptive statistics (mean, standard deviation), comparative analysis (Mann-Whitney U test due to non-normal distribution), and correlational analysis (Spearman rank-order correlation). The study adhered to the Philippine Health Research Ethics Board (PHREB) guidelines.

3. results and discussion

**Profile of the Respondents**

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| **Table 1.** *Profile of the Respondents* |
| **Variable** | **n** | **%** |
| Sex |  |  |
|  Male | 52 | 24.2 |
|  Female | 163 | 75.8 |
| Year Level |   |   |
|  Level 3 | 133 | 61.9 |
|  Level 4 | 82 | 38.1 |
| ***Whole*** | ***215*** | ***100.0*** |

Table 1 presents the demographic profile of the respondents. Data show that the majority of the participants were female, comprising 75.8% (n=163), while males accounted for 24.2% (n=52). In terms of the year level, most respondents were at Level 3, representing 61.9% (n=133), whereas 38.1% (n=82) were at Level 4.

The predominantly female representation is reflective of the general gender distribution within nursing programs in the Philippines. The larger number of Level 3 students in the sample suggests that their perspectives may have a greater influence on the overall results. When analysing the perceptions of clinical instructor behavior and student engagement, it is useful to consider whether any observed trends or differences align with these demographic characteristics within the context.

**Extent of Clinical Instructor Behavior as assessed by the BS Nursing Students**

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| **Table 2.** *Extent of Clinical Instructor Behavior as assessed by the BS Nursing Students* |
| **Variable** | **Clinical** **Experience** | **Teaching** **Skills** | **Clinical** **Competency** | **Professional** **Acceptability** | **Instructor** **Behavior** |
| **M** | **SD** | **Int** | **M** | **SD** | **Int** | **M** | **SD** | **Int** | **M** | **SD** | **Int** | **M** | **SD** | **Int** |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  Male | 3.72 | 0.37 | VG | 3.73 | 0.30 | VG | 3.73 | 0.37 | VG | 3.77 | 0.32 | VG | 3.74 | 0.30 | VG |
|  Female | 3.71 | 0.34 | VG | 3.69 | 0.33 | VG | 3.74 | 0.30 | VG | 3.75 | 0.31 | VG | 3.72 | 0.28 | VG |
| Year Level |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|  Level 3 | 3.70 | 0.34 | VG | 3.70 | 0.31 | VG | 3.76 | 0.30 | VG | 3.78 | 0.29 | VG | 3.73 | 0.27 | VG |
|  Level 4 | 3.74 | 0.35 | VG | 3.71 | 0.34 | VG | 3.71 | 0.33 | VG | 3.72 | 0.34 | VG | 3.72 | 0.30 | VG |
| ***Whole*** | ***3.71*** | ***0.34*** | ***VG*** | ***3.70*** | ***0.32*** | ***VG*** | ***3.74*** | ***0.31*** | ***VG*** | ***3.76*** | ***0.31*** | ***VG*** | ***3.73*** | ***0.28*** | ***VG*** |

Table 2 presents the extent of clinical instructor behavior as assessed by the BS nursing students. As a whole (M=3.73, SD=0.28), the clinical instructor behavior was rated very great. This suggests that instructors consistently employ effective teaching practices and actively promote student well-being, fostering a supportive atmosphere conducive to skill development and professional growth.

Consequently, these positive interactions likely contribute to higher student satisfaction, stronger professional role modeling, and ultimately better preparedness for their future nursing careers, reflecting the strength and effectiveness of the BS Nursing program's clinical education.

This finding is supported by Mohamed and Ahmed (2022), who stated that when the clinical instructor's teaching behavior is positive, it positively affects the nursing students' efficacy. This is also supported by Taylan et al. (2021), who found that as “students' perceptions of clinical instructor caring increased, their status of applying professional behaviors was found to increase as well”.

In terms of sex, the results indicate that male students (M=3.74, SD=0.30) and female students (M=3.72, SD=0.28) both perceived instructor behavior as very great. This suggests students of both sexes find instructors consistently employing effective teaching practices and actively promoting student well-being, fostering a supportive atmosphere conducive to skill development and professional growth.

In terms of year level, Level 3 students (M=3.73, SD=0.27) and Level 4 students (M=3.72, SD=0.30) both perceived instructor behavior as very great. This means that students, regardless of year level, always find instructors demonstrating behavior that promotes student learning and well-being.

However, Balay-Odao et al.’s (2023) findings proved otherwise. Although students perceived instructor caring as high, there were significant variations in the students' perceived instructor's caring in terms of year level.

Of the four areas of clinical instructor behavior, professional acceptability obtained the highest mean (M=3.76, SD=0.31), interpreted as very great. This means that the instructor always demonstrates behavior that promotes student learning and well-being.

However, this finding is contradicted by Wanchai et al. (2022) whose study found that “subject expertise was the most essential characteristic of the effective nurse educators, followed by relational expertise, personality, and teaching-related behavior”. Also, the study of Soroush et al. (2021) found that “the most important characteristics of effective clinical instructors were related to communication and teaching skills, internal motivation, and professional appearance”.

In terms of sex, the results indicate that male students (M=3.77, SD=0.32) and female students (M=3.75, SD=0.31) both perceived professional acceptability as very great. This finding indicates that instructors consistently demonstrate professional behavior that is well-received and respected by students of both genders.

This finding is supported by RabiaSiddiqui et al. (2019) whose study found that “both male and female medical students had a good understanding of acceptable professional behaviors wherein less professional behaviors were categorised as unacceptable and more professional behaviors as acceptable”.

In terms of year level, Level 3 students (M=3.78, SD=0.29) and Level 4 students (M=3.72, SD=0.34) also perceived professional acceptability as very great. This finding suggests that clinical instructors consistently uphold high professional standards throughout the later stages of the program.

However, Soroush et al.’s (2021) study found that “the most important characteristics of effective clinical instructors were related to communication and teaching skills, internal motivation, and professional appearance. Professional acceptability did not come as top characteristic of an effective clinical instructor”.

Next to professional acceptability, clinical competency ranked second. The BS nursing students rated their clinical instructors in this area very great (M=3.74, SD=0.31). This suggests a high level of confidence in the skills and abilities they are developing through their clinical education.

This is in congruence with Cuesta-Piencenaves and Amparado (2020), whose findings provided a crucial foundation for interventions (like the training program) aimed at improving factors leading to clinical instructors’ competence, which consequently enhances student engagement. The findings of Pramila-Savukoski et al. (2019) support this after their study found that “clinical instructors’ competences related to the clinical environment, mentoring, supporting students' learning processes and relevant personal characteristics are fairly high”.

In terms of sex, the results indicate that male students (M=3.73, SD=0.37) and female students (M=3.74, SD=0.30) both perceived clinical competencies as very great. This suggests that the program effectively fosters a strong sense of preparedness in both genders.

This finding is supported by Mukan et al. (2021) who stated that “nursing students’ perspective of effective clinical teachers’ behavior is an important indicator of facilitating and improving clinical education quality, and their study found that nursing students, both males and females, perceived clinical teaching behavior as most important while personal characteristics are the least important effective”.

In terms of year level, Level 3 students (M=3.76, SD=0.30) and Level 4 students (M=3.71, SD=0.33) also perceived clinical competency as very great. This indicates that the program effectively instils a strong sense of preparedness and capability throughout the later stages of their education.

This finding on clinical competency as regards the year level of students is supported by Freeman et al. (2024) whose study found that “from the third to fourth year, medical students undergo a process of professional growth that can be documented at a granular level through their perceptions of themselves, their patients, and their preceptors. Despite positive professional growth, students' lingering negative affect merits attention and support from clinical teachers, hence the necessity for clinical competency on clinical instructors”.

The area of clinical experience came third with the BS nursing students rating their instructors very great (M=3.71, SD=0.34). This means the instructor always demonstrates behavior that promotes student learning and well-being.

This is supported by Goldhaber et al. (2022), who stated that clinical teaching experience is one of the most important components of teacher preparation. However, Swart and Hall (2020) averred that “clinical instructors (CIs) experience tensions that influence their retention and impact the sustainability of consistent, quality education for students”.

In terms of sex, the results indicate that male students (M=3.72, SD=0.37) and female students (M=3.71, SD=0.34) both perceived their clinical experience as very great. This also means that the instructor always demonstrates behavior that promotes student learning and well-being.

However, the study of Lammers and Byrd (2019) found that student gender and instructor gender are key factors in predicting student-instructor rapport, with higher femininity students showing higher expected rapport ratings to both feminine and masculine instructors.

 In terms of year level, Level 3 students (M=3.70, SD=0.34) and Level 4 students (M=3.74, SD=0.35) also perceived their clinical experience as very great. This means the behavior demonstrated always promotes student learning and well-being.

This finding is supported by Jinli et al. (2024) who found that nursing students in China perceive clinical instructors' caring behavior positively, with year level being the only significant factor affecting their perceptions of caring behavior. Results further revealed that only the year level of the students is significantly associated with caring behavior perceptions demonstrated by the clinical instructors.

The area on teaching skills placed last; the BS nursing students rated their instructors in this area very great (M=3.70, SD=0.32). This underscores the high caliber of pedagogical practices within the clinical setting.

This finding is supported by Hababeh and Lalithabai (2020) who believe that “effective clinical teaching improves the clinical practice of the nursing trainees, which in turn improves the quality of patient care. It mandates that the clinical instructor with desired qualities, to have a positive influence in clinical education”. The role of training program was underscored by Mallek and El-Hosany (2020) in relation to this as they found a statistically significant improvement between mean scores of clinical instructors in relation to their skills at pre, post, and follow up stages of the training program.

In terms of sex, the results indicate that male students (M=3.73, SD=0.30) and female students (M=3.69, SD=0.33) both perceived teaching skills as very great. This suggests that the effectiveness of the instructors' pedagogical approaches is consistent across genders.

However, this finding differs from Kuwaiti et al. (2020) who found that female medical students at Imam Abdulrahman Bin Faisal University in Saudi Arabia perceive lecturing skills more positively than male students. Also, this is supported by Khokhlova et al.’ (2023) finding that male instructors are perceived as more enthusiastic and engaging in higher education, potentially contributing to subconscious discrimination against women academics in underrepresented regions.

In terms of year level, Level 3 students (M=3.70, SD=0.31) and Level 4 students (M=3.71, SD=0.34) also perceived teaching skills as very great. This indicates that the high quality of clinical instruction is maintained throughout the later years of the program.

However, this finding contradicts that of Buanz et al. (2024) whose study found significant differences in perceptions of instructor characteristics (such as teaching ability, personality, and interpersonal relations) across academic levels, indicating that as students progress, their expectations and evaluations of instructors may change.

**Degree of Student Engagement as assessed by the BS Nursing Students**

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| **Table 3.** *Degree of Student Engagement as assessed by the BS Nursing Students* |
| **Variable** | **Meaningful Process** | **Participation** | **Focused Attention** | **Student Engagement** |
| **M** | **SD** | **Int** | **M** | **SD** | **Int** | **M** | **SD** | **Int** | **M** | **SD** | **Int** |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
|  Male | 3.67 | 0.38 | VH | 3.73 | 0.37 | VH | 3.65 | 0.39 | VH | 3.69 | 0.33 | VH |
|  Female | 3.72 | 0.31 | VH | 3.65 | 0.42 | VH | 3.66 | 0.37 | VH | 3.68 | 0.33 | VH |
| Year Level |   |   |   |   |   |   |   |   |   |   |   |   |
|  Level 3 | 3.71 | 0.31 | VH | 3.66 | 0.42 | VH | 3.64 | 0.38 | VH | 3.67 | 0.33 | VH |
|  Level 4 | 3.70 | 0.35 | VH | 3.68 | 0.39 | VH | 3.69 | 0.35 | VH | 3.69 | 0.33 | VH |
| ***Whole*** | ***3.70*** | ***0.33*** | ***VH*** | ***3.67*** | ***0.40*** | ***VH*** | ***3.66*** | ***0.37*** | ***VH*** | ***3.68*** | ***0.33*** | ***VH*** |

Table 3 presents the degree of student engagement as assessed by the BS nursing students. As a whole (M=3.68, SD=0.33), student engagement was rated very high, which means the student always participates in clinical and classroom activities.

This finding is supported by Pedler et al. (2020) who described student engagement as a combination of behavior, emotion, and cognitive aspects of being engaged in learning, and positive student engagement results in positive learning outcomes. Also, Mohamed et al. (2021) found “significant associations of students’ engagement, facilitating conditions, and students’ motivation with a significant effect on academic achievement”. Xu et al.'s (2023) mixed-methods study revealed that cognitive engagement needs improvement and suggested educators foster diverse activities, quality social interaction, and student autonomy and self-efficacy.

In terms of sex, the results indicate that male students (M=3.69, SD=0.33) and female students (M=3.68, SD=0.33) both perceived student engagement as very high, which means both sexes always participate in clinical and classroom activities.

This finding is supported by Lei et al. (2018) who found that “the relationships of behavioral, emotional, and cognitive engagement with academic achievement were influenced by reporting method for engagement, cultural value, or gender”. However, Liu and Li (2017) found “masculinity and male advantage in the learning environments, providing implications for future nursing education and counseling service and suggesting promoting an active yet gender-sensitive nursing education for training nursing professionals”. Also, Jurado et al. (2020) saw the conditional effect of interaction of sex as the results revealed “the existence of significant differences in engagement depending on the sex of the nursing professionals. Furthermore, this study showed that the interpersonal component of emotional intelligence is the predictor of engagement of female professionals, while mood and the interpersonal dimensions have a higher predictive value of engagement in males”.

In terms of year level, Level 3 students (M=3.67, SD=0.33) and Level 4 students (M=3.69, SD=0.33) also perceived student engagement as very high. This indicates that a strong level of active involvement and investment in learning is sustained throughout the later years of the program.

This is also shown in the study of Terry and Peck (2020) that “students, regardless of their year of study or any other demographic factor, showed grit as a significant predictor of clinical and academic performance. The strength between grit and perceived performance both academically and clinically, makes grit a valuable factor for development in students as a vehicle for success in nursing programs of study”. However, the study of Leijser and Spek (2020) that “fourth-year students scored on a significantly higher level of clinical reasoning compared to the second - and third-year students, highlighting that the level of clinical reasoning could be explained by education year and number of days of internship in the hospital care”. Also, Xavier (2023) studied student engagement in the College of Nursing and found that student engagement in academics is highest in the second and third years, with the lowest engagement in first and last years. Moreover, Covas and Veiga (2021) found that students aged 26 or older scored considerably higher in engagement than younger colleagues.

Of the three domains of student engagement, meaningful process obtained the highest mean (M=3.70, SD=0.33), interpreted as very high. This implies that students perceive their learning activities and experiences as relevant, purposeful, and contributing significantly to their understanding and skill development.

This finding is supported by Henderson et al. (2018) who introduced the Check-in and Check-out process to engage students as active partners in their learning and teaching in their clinical preparation for practice and found that “a consistent learning process-including a common language that easily transfers across all clinical courses and clinical settings-arguably enhances the students' learning experience, helps them to actively manage their preparation for clinical practice and to develop self-efficacy”. Also, Hughes et al. (2020) found that regular online quizzes effectively promote student engagement, reduce stress, and increase preparedness for and participation in face-to-face tutorial sessions.

In terms of sex, male students (M=3.67, SD=0.38) and female students (M=3.72, SD=0.31) both perceived the meaningful process as very high. It suggests that both genders find value and purpose in their educational activities.

This is supported by Luitel (2024) whose study found that “female university students in Kathmandu exhibit higher intrinsic motivation and engagement, while males show slightly higher extrinsic motivation, highlighting the need for gender-sensitive educational strategies”.

Regarding year level, Level 3 students (M=3.71, SD=0.31) and Level 4 students (M=3.70, SD=0.35) also rated the meaningful process as very high. This indicates that the curriculum and teaching strategies effectively convey the relevance and purpose of their studies throughout the later stages of the program.

However, Borromeo and Borromeo (2020) obtained the clinical learning engagements of the levels 2, 3, and 4 nursing students and found moderate to high extent of engagement, with significant differences noted in all the variables, including year level.

The domain on participation came second, with the results indicating that student engagement was rated very high (M=3.67, SD=0.40). This suggests that students are actively involved in classroom activities, discussions, and other learning opportunities.

This is supported by Pedregosa et al. (2020) who found that “the complementary roles of clinical faculty and clinical mentor, in addition to education and health institutions managers commitment, could successfully facilitate students' clinical learning”. Also, Clynes et al. (2020) found that “students engaged most in activities that are considered core to higher education: higher-order learning, collaborative learning, and effective learning strategies”.

In terms of sex, male students (M=3.73, SD=0.37) and female students (M=3.65, SD=0.42) both perceived participation as very high. This indicates that both genders are actively involved in the learning process.

However, Aguillon et al. (2020) contradict this finding because their study found that men participated more than expected based on the class composition in most participation categories. Contrastingly, Sethi et al. (2024) found that female medical students perform better than male students, but both genders tend to underrate their clinical performance, suggesting gender-based differences in self-evaluations.

Regarding year level, Level 3 students (M=3.66, SD=0.42) and Level 4 students (M=3.68, SD=0.39) also rated participation as very high. This suggests that active involvement in learning activities is sustained throughout the later years of the program.

However, this finding contradicts Kim et al. (2022) who found that “third-year students experienced lower stress than did fourth-year students in their clinical clerkship”. Also, Nguyen et al. (2023) found that “third-year students’ perception of their evaluation was not significantly different between cases and controls and agreed that their participation was beneficial in reducing their stress, increasing their preparedness, and improving their communication skills”.

The domain on focused attention came last, with the results indicating that student engagement was rated very high (M=3.66, SD=0.37). This suggests that students are generally able to concentrate and maintain their attention during learning activities.

This is supported by Burger and Lockhart (2017) who stated that “strengthening attention-regulation efficiency of nurse graduates is important to the quality and safety of nursing practice. Their study revealed that meditation demonstrated moderate strength for enhancing executive attention”. Also, Badlis et al. (2023) support that “student community engagement provides skills relevant to professional nursing practice and has implications for strategies to promote community engagement among nurses”.

In terms of sex, male students (M=3.65, SD=0.39) and female students (M=3.66, SD=0.37) both perceived focused attention as very high. This suggests that both genders are generally engaged and able to concentrate effectively in the learning environment.

However, Deng et al. (2022) found that gender differences in emotional intelligence, empathy, and problem-solving ability influence nursing students' effective communication in clinical practice, with problem-solving ability being the most important factor. Also, Herlina et al. (2024) found that gender influences the academic achievement of nursing diploma program students, with female students achieving higher GPAs than male students.

In terms of year level, Level 3 students (M=3.64, SD=0.38) and Level 4 students (M=3.69, SD=0.35) also rated focused attention as very high. This indicates that the learning environment effectively supports students' ability to concentrate and maintain focus throughout the later years of their program.

However, Tower et al. (2019) found in their study that “students demonstrated levels 1, 2 and 3 SA when making clinical decisions, and it was not demonstrated consistently and at times subsequent decision-making was inappropriate”.

**Difference in the Degree of Student Engagement as assessed by the BS Nursing Students according to Sex**

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| **Table 4.** *Difference in the Degree of Student Engagement as assessed by the BS Nursing Students according to Sex* |
| **Variable** | **U** | **z** | **p** |
| Meaningful Process | 4047.500 | -0.500 | 0.617 |
| Participation | 3691.000 | -1.458 | 0.145 |
| Focused Attention | 4188.000 | -0.131 | 0.896 |
| Student Engagement | 4150.500 | -0.226 | 0.821 |
| *Note: the difference in the means is significant when p≤0.05* |

The Mann-Whitney U test was used to determine the significant difference in student engagement variables when grouped according to sex. The results as presented in table 4 showed no significant difference in meaningful process [U=4047.500, p=0.617], participation [U=3691.000, p=0.145], focused attention [U=4188.000, p=0.896], and student engagement [U=4150.500, p=0.821]. These results suggest that male and female students had similar perceptions of these engagement variables.

This implies that, despite the predominantly female sample, both male and female students in the BS Nursing program share similar views on how meaningful they find their learning, their level of participation, their ability to focus, and their overall engagement in their studies. This suggests that the factors influencing student engagement are experienced similarly across genders within this specific context.

This finding is supported by studies cited earlier: Lei et al. (2018) found that “the relationships of behavioral, emotional, and cognitive engagement with academic achievement were influenced by reporting method for engagement, cultural value, or gender”. However, Liu and Li (2017) found “masculinity and male advantage in the learning environments” and Jurado et al. (2020) saw “the conditional effect of interaction of sex as the results revealed the existence of significant differences in engagement depending on the sex of the nursing professionals”.

**Difference in the Degree of Student Engagement as assessed by the BS Nursing Students according to Year Level**

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| **Table 5.** *Difference in the Degree of Student Engagement as assessed by the BS Nursing Students according to Year Level* |
| **Variable** | **U** | **z** | **p** |
| Meaningful Process | 5328.500 | -0.288 | 0.773 |
| Participation | 5339.500 | -0.267 | 0.790 |
| Focused Attention | 5047.000 | -0.938 | 0.348 |
| Student Engagement | 5184.500 | -0.612 | 0.540 |
| *Note: the difference in the means is significant when p≤0.05* |

The Mann-Whitney U test was used to determine the significant difference in student engagement variables when grouped according to year level. The results as presented in table 6 showed no significant difference in meaningful process [U=5328.500, p=0.773], participation [U=5339.500, p=0.790], focused attention [U=5047.000, p=0.348], and student engagement [U=5184.500, p=0.540]. These results suggest that Level 3 and Level 4 students had similar perceptions of these engagement variables.

This suggests that students in both year levels within the program share similar views on how meaningful they find their learning, their level of involvement, their ability to concentrate, and their overall engagement in their studies. This consistency in perception across year levels highlights that the factors influencing student engagement are experienced similarly by students regardless of their progression within the program.

This finding is supported by Terry and Peck (2020), as cited earlier, that “students, regardless of their year of study or any other demographic factor, showed grit as the significant predictor of clinical and academic performance”. However, the study of Leijser and Spek (2020) that fourth-year students scored on a significantly higher level of clinical reasoning compared to the second - and third-year students, highlighting that the level of clinical reasoning could be explained by education year and number of days internship in hospital care. Also, Xavier (2023) studied student engagement in the College of Nursing and found that student engagement in academics is highest in second and third years, with the lowest engagement in first and last years. Moreover, Covas and Veiga (2021) found that students aged 26 or older scored considerably higher in engagement than younger colleagues.

**Relationship between Clinical Instructor Behavior and Student Engagement**

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| **Table 6.** *Relationship between Clinical Instructor Behavior and Student Engagement* |
| **Variable** | **rs** | **df** | **p** |
| Clinical Instructor Behavior x Student Engagement | 0.796\* | 213 | 0.000 |
| *Note: \*correlation is significant when p≤ 0.05* |

The Spearman rank-order correlation was used to determine the relationship between student engagement and instructor behavior. The results as presented in table 6 showed a significant positive correlation between student engagement and instructor behavior [rs(213)=0.796, p=0.000], indicating that higher levels of student engagement were associated with more positive perceptions of instructor behavior.

The significant positive correlation between student engagement and instructor behavior among the BS Nursing students underscores the vital influence of clinical instructors on student involvement in their learning. This strong relationship indicates that more positive instructor behaviors, which foster a supportive and conducive learning environment, are directly associated with higher levels of student engagement, encompassing a sense of meaningfulness in learning, active participation, and sustained focused attention. These findings highlight the critical role of instructors in creating engaging learning experiences and suggest that efforts to further enhance instructor behavior could lead to significant improvements in student engagement. Given the already high ratings for both instructor behavior and student engagement, this correlation reinforces the effectiveness of current instructional practices and emphasizes the value of continued investment in the training and development of clinical instructors to optimize student engagement and learning outcomes in the BS Nursing program of the Catholic higher education institution.

This finding is supported by Zhang and Hyland (2022) who found that integrated approach, including the professor, could promote students' behavioral, affective and cognitive aspects. Although student engagement is a complex process, the role of the teacher cannot be undermined. In other words, both come together to create a meaningful learning environment. Student engagement and clinical instructor behavior are intertwined to make student nurses learn. Also, Knight (2018) saw “a strong connection between overall CI need-supporting/thwarting behavior and student clinical engagement”. Taylan et al. (2020) also supported this finding as their study showed that “professional behaviors of nursing students were found to increase their desire to become a nurse in the future with "instills confidence through caring" and "supportive learning climate" subscales but to decrease their desire to be an academician in the future. Hence, as students' perceptions of clinical instructor caring increased, their status of applying professional behaviors was found to increase, as well”. Finally, this finding also finds support from Cents-Boonstra et al. (2020) who found that teachers who use motivating teaching behaviors, such as relatedness support and guidance, can significantly increase student engagement in lessons.

4. Conclusion

Based on the findings of the study, the clinical instructor's behavior was rated very great as a whole and when the BS Nursing students were grouped according to sex and year level. All the areas of clinical instructor behavior, such as clinical experience, teaching skills, clinical competency, and professional acceptability, were rated as very great. Meanwhile, the degree of student engagement, in all its domains such as meaningful process, participation, and focused attention, is very high as assessed by the BS nursing students as a whole and when grouped according to sex and year level.

Moreover, there is no significant difference in meaningful process, participation, focused attention, and student engagement when students are grouped according to sex and year level. Finally, there is a significant positive correlation between student engagement and instructor behavior, indicating that higher levels of student engagement are associated with more positive perceptions of instructor behavior.

**Ethical Approval:**

As per international standards or university standards written ethical approval has been collected and preserved by the author(s).

**Disclaimer (Artificial intelligence)**

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

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