

A cross-sectional study on the professional excitement of Vietnamese nursing students and related factors

Research Article

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Abstract

Objective: The profession's development requires an advanced science and skills degree. The major's excitement helps students reduce stress and become more active in their studies. As a result, excitement about the major plays an essential role in increasing the efficiency and quality of learning. This study aims to determine the level of excitement and the factors related to the significant excitement of nursing students at the University of Medicine and Pharmacy in Ho Chi Minh City. **Methods:** The cross-sectional study was conducted on an online survey of 465 nursing students. Each student completed a survey about the level of excitement based on awareness, emotions, learning behaviours, and factors related to excitement in a nursing major. Descriptive statistics were used to determine the current situation of nursing students' excitement for majors and related factors, and the chi-square test was used to assess the relationships. **Results:** The level of nursing students' excitement in the major evaluated through awareness, emotion, and behaviour was average (17.35 points). Factors related to academic interest include as follows: Year(s) of study ($p < 0.001$). The most crucial objective factor is job opportunities (89%). The most critical subjective factor is understanding the role and responsibilities of being a nurse (81.5%). **Conclusion:** According to the results, nursing students' excitement in Vietnam about their major was average and tended to decrease gradually over the school years. Job opportunities and a strong understanding of the role and responsibilities of a nurse are essential factors related to students' excitement about the major.

Key Words: Academic interest, Excitement, Job opportunity, Nursing profession, Nursing students; Vietnam.

Introduction

Excitement is an individual's unique attitude toward a subject that brings meaning to life and pleasure to the person's participation in the activity (1). From Nguyen's concept of excitement (1): Excitement in the nursing profession is a particular attitude of students towards studying nursing, nursing practice, nursing roles, and competencies. Therefore, students can recognize the significance of the profession in their lives and can instill passion in students during the learning and training process. Therefore, with their enthusiasm and excitement, stress and weariness are reduced, and concentration is enhanced, allowing one to explore actively, be creative, and succeed easily in their studies and career (2). Moreover, the nursing profession is often under pressure from patients and families and has an overwhelming workload; hence, it is required to have passion for the work to overcome these difficulties.

International research has been conducted on the nursing profession awareness among students participating in the major. Aljarrah reported that his students' majority (80,9%) were proud of their principal when talking about the nursing profession (3). Similarly, according to Rabia Allari's study in 2020, half of nursing students are proud of their profession. On the contrary, many other researchers have suggested that nursing students have a negative awareness of their profession and join this significant due to reasons other than passion (3-5). In summary, despite efforts to boost learning excitement among nursing students, many still have negative opinions toward the profession, according to several national studies. In Vietnam, specifically the University of Medicine and Pharmacy in Ho Chi Minh City, the nursing department have organized an annual program, called 'Bridge of Experience', for all nursing students and lecturers to gather, and share their learning experiences, clinical practices, and nursing works. This is to help students develop better learning strategies and motivations to improve academic performance. As for teaching methods, the Nursing Department has gradually applied active, student-centred methods to increase students' excitement in the learning process. This research surveys the nursing students' excitement level in their major through awareness, emotion, learning behaviour, and learning about the factors related to their excitement in the field.

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Material and Methods

Study setting and participants

- This is a descriptive cross-sectional study.
- Research time: From June to July 2021.
- Inclusion Criteria: The study participants were nursing students from freshman to senior studying at Ho Chi Minh City University of Medicine and Pharmacy, in the academic year 2020-2021.
- Sample size: The sampling method was convenient.

- The expected sample size: $N = \frac{Z^2 P(1-P)}{d^2} = 369$

Where:

- N: The number of people who participated in the study.
- P: According to Mai Thi Thu Hang's published survey of nursing students in Nam Dinh, 4% of students had a high level of interest (6).
- d: Because $P = 0.04 < 0.1$, so $d = P/2 = 0.02$.
- $Z = 1.96$ corresponds to 95% confidence
- According to the formula, the sample size is projected to be 369 students.
- The study was conducted to sample the whole thing. The total number of nursing students at the Faculty of Nursing - Medical Technology, University of Medicine and Pharmacy, Ho Chi Minh City, satisfies the sample criteria. Therefore, the sample size is 592 students. During the research period, 465 students participated in the study (78.5%).

Ethical consideration

Before participating in the research, subjects were clearly explained the study's information, privacy policy, and the right to opt-out of the study. The protocol of the study was reviewed and approved by the Ethics Committee of Ho Chi Minh City University of Medicine and Pharmacy (Approval number: 400/HĐĐD-DHYD. Approval date 03/06/2021).

Data collection

Data is collected online through the Microsoft Form survey link. The survey form contains the following information: Research details, researcher contact information, privacy policies, and voluntary consent to participate in the research. Participants can use the contact information to ask the researcher questions about the study. If participants agree to participate in the study, they must complete the survey questionnaire within seven days.

Data collection instrument

Based on a detailed questionnaire prepared by Hang and Loan (6), which assesses nursing students' excitement through awareness, emotion, behaviour, and studies the factors that relate to students' excitement, the researcher was contacted by the author by email and permitted to use the questionnaire for this study. Then, the questionnaire was reconstructed to follow the purpose of the study.

The questionnaire consists of 3 parts:

- Part 1: The demographic data asks about age, gender, address, school year, and learning results.

- Part 2: The Excitement questionnaire consists of 3 parts, including awareness, emotion, and behaviour, measured by 3 points. There are 9 questions for juniors and seniors that assess their level of excitement based on awareness, emotion, and behaviour. There are eight questions for freshmen and sophomores (no question number 9 on the clinical internship). This is because freshmen did not have a clinical internship at the hospital. While sophomores did, because of the Covid-19 epidemic, students had little to practice at the hospital, so they could not correctly assess question number 9 on clinical practice. The total excitement score (Junior and Senior) equals a total score of 9 questions ranging from 0 points to 27 points. There are 3 levels of excitement: Low: fewer than 13 points, average: 13 to 20 points, and high: greater than 20 to 27 points. The total excitement score (Freshmen and Sophomore) equals a total score of 8 questions ranging from 0 to 24 points. There are 3 levels of excitement: Low: fewer than 12 points, average: 12 to 18 points, and high: greater than 18 to 24 points.
- Part 3: Related factors include 2 questions with 3 Likert scales asking about subjective and objective factors related to nursing students' excitement about the nursing major. Besides, causes that motivate students to study nursing at the Ho Chi Minh City Medicine and Pharmacy University are analyzed using the percentage. In part 3, the descriptive statistical method is used to determine the factors related to the student's interest in the field and at the same time find out the reasons for studying nursing.

The instrument was evaluated with the input of 5 nursing students to assess the understanding ability of the questionnaire and 2 nursing lecturers at the University of Medicine and Pharmacy in Ho Chi Minh City for CVI assessment. The result showed that the I-CVI value ranged from 0.857 to 1, and the S-CVI value was 0.986.

The reliability of the instrument was tested by Cronbach's Alpha on 30 nursing students. The results of Cronbach's Alpha on awareness: 0.89; emotion: 0.85; behaviour: 0.86; all factors related: 0.81.

Data analysis

Data were analyzed using the SPSS software, version 26.0. Categorical variables were presented by frequency and percentages. Continuous variables were presented by average value and standard deviation. The relationship between demographic characteristics and excitement in the nursing major and the relationship between related factors and excitement in the major was tested by the Chi-square test with $p < 0.05$, which was considered to be statistically significant.

Results

Most of the students who participated in the study were female (88.8%). The students in rural areas accounted for 56.6%, and urban students accounted for 43.4%. The students' average ages were 20.3 ± 1.3 , the youngest was 19, and the oldest was 26. There were 121 freshmen (26.0%), 129 sophomores (27.7%), 102

juniors (21.9%), and 113 seniors (24.3%). Most participants' academic results were considered 'Good' (49.5%).

Awareness, emotion, and learning behaviour are closely related to forming students' excitement in the major of nursing. The consistency between cognition,

emotion, and behaviour are the basis for assessing the level of excitement in nursing students. The survey results show that the level of excitement among nursing students at the University of Medicine and Pharmacy in Ho Chi Minh City is medium (17.35 points) (Table 1).

Table 1: The level of excitement among nursing students in their major

	Expression of excitement	M ± SD
Awareness	The work of nursing	2.29 ± 0.453
	Necessary psychological qualities	2.53 ± 0.359
	Importance of subjects	2.36 ± 0.38
Emotion	Emotions at admission	1.73 ± 0.718
	Emotions current	1.59 ± 1.000
	Moods and emotions in the classroom	1.75 ± 0.554
Behaviour	Learn about nursing before entering school	1.39 ± 0.676
	Performing learning tasks in class and at home (1st year, 2nd year, 3rd year, 4th year)	1.52 ± 0.403
	Performing work during the clinical internship (3rd year, 4th year)	2.19 ± 0.358
Total awareness, emotional, and behavioural scores		17.35

Total awareness, emotional, and behavioural scores range from 0 to 27 points. There are 3 levels: Low: <13 points; Average: 13 to 20 points; High: >20 to 27 points. Out of a total of 465 students, the percentage of students with a high level of excitement is 17.4%, the average level is 73.8%, and the low level is 8.8% (Table 2). Comparing the academic years, the level of excitement is highest in freshmen and lowest in juniors (Table 2).

Table 2: The level of excitement in the major of nursing students expressed through awareness, emotion, and behaviour

The level of excitement in the major of the nursing	Frequency (Percentages)				Total
	Freshmen	Sophomore	Juniors	Seniors	
Low	11 (9.1%)	19 (14.7%)	6 (5.9%)	5 (4.4%)	41 (8.8%)
Medium	76 (62.8%)	91 (70.6%)	87 (85.3%)	89 (78.8%)	343 (73.8%)
High	34 (28.1%)	19 (14.7%)	9 (8.8%)	19 (16.8%)	81 (17.4%)

For first-year and second-year students: The total score is from 0 to 24 points. Divided into 3 levels: Low: <12 points, Medium: 12 to 18 points; High: >18 to 24 points. For 3rd and 4th-year students: The total score is from 0 to 27 points. Divided into 3 levels: Low level: <13 points; Average: 13 to 20 points; High: >20 to 27 points. The main reason that motivates students to be major in nursing: it is easy to find work after graduation (28.36 per cent) (Table 3).

Table 3: Causes that motivate students to study nursing at the Ho Chi Minh City Medicine and Pharmacy University

Cause	Frequency (Percentages)
Want to become an expert in the field of healthcare	226 (23.57%)
Want to make a pleasing family?	83 (8.65%)
The entry standard is low and was not accepted to another major	116 (12.10%)
Matches ability	216 (22.52%)
Easy to find work after graduation	272 (28.36%)
Other	46 (4.80%)

Upon examining the objective factors related to students' excitement about the nursing major, the most related factors in the field are jobbed opportunities (89.0%) (Table 4). The most significant crucial subjective factor related to students' excitement about the nursing major is understanding the role and responsibilities of a nurse (81.5%). In addition, passion for the job is a prevalent factor (80.0%) (Table 5).

Table 4: Objective factors affecting nursing students' excitement about the major of the nursing

Objective factors	Frequency (Percentages)		
	No influence	Little influence	Influential
The distribution of training programs	26 (5.6%)	171 (36.8%)	268 (57.6%)
Instructor's teaching method	17 (3.7%)	82 (17.6%)	336 (78.7%)
Work environment	10 (2.2%)	55 (11.8)	400 (86.0%)
Conditions and means of teaching	21 (4.5%)	139 (29.9)	305 (65.6%)
Income level of the profession	7 (1.5%)	75 (16.1%)	383 (82.4%)
Job Opportunity	8 (1.7%)	43 (9.2%)	414 (89.0%)
Support and encouragement from family	26 (5.6%)	124 (26.7%)	315 (67.7%)
Social appreciation for the profession	25 (5.4%)	132 (28.4%)	308 (66.2%)
Conditional health care for one's own and close ones	13 (2.8%)	92 (19.8%)	360 (77.4%)
The assessment of learning outcomes	11 (2.4%)	170 (36.6%)	284 (61.1%)

Table 5: These subjective factors affect the excitement of the nursing students

Subjective factors	Frequency (Percentages)		
	No influence	Little influence	Influential
Self-learning method	21 (4.5%)	137 (29.5%)	307 (66.0%)
Understanding the work of a Nurse	14 (3.0%)	72 (15.5%)	279 (81.5%)
High/low academic results	14 (3.0%)	164 (35.3%)	287 (61.7%)
Qualities consistent with the requirements of the job	10 (2.2%)	127 (27.3%)	328 (70.5%)
Interest in the job	14 (3.0%)	79 (17.0%)	372 (80.0%)
Interest in the subject	16 (3.4%)	159 (34.2%)	290 (62.4%)
Learning motivation	9 (1.9%)	96 (20.6%)	360 (77.4%)

The chi-square test was used to examine the relationship between demographic factors and academic excitement. The only factor that had a statistically significant difference was the school year ($p \leq 0.05$) (Table 6).

Table 6: The relationship between demographic factors and academic excitement

Characteristics	The level of excitement in the nursing major			χ^2	p
	Low	Medium	High		
Sex					
Male	5 (12.2%)	35 (10.2%)	12 (14.8%)	1.449	0.485
Female	36 (87.8%)	308 (89.8%)	69 (85.2%)		
Residence					
Countryside	27 (65.9%)	193 (56.3%)	43 (53.1%)	1.851	0.396
City	14 (34.1%)	150 (43.7%)	38 (46.9%)		
Religion					
Yes	7 (17.1%)	79 (23.0%)	22 (27.2%)	1.581	0.454
No	34 (82.9%)	264 (77.0%)	59 (72.8%)		
School year					
Freshmen	11 (26.8%)	76 (22.2%)	34 (42.0%)	25.772	< 0.001 (*)
Sophomore	19 (46.3%)	91 (26.5%)	19 (23.5%)		
Junior	6 (14.6%)	87 (25.4%)	9 (11.1%)		
Senior	5 (12.2%)	89 (25.9%)	19 (23.5%)		
Learning outcomes					
Weak - Average	12 (29.3%)	69 (20.1%)	21 (25.9%)	4.228	0.638
Good	19 (46.3%)	173 (50.4%)	38 (46.9%)		
Very good	8 (19.5%)	71 (20.7%)	13 (16.0%)		
Excellent	2 (4.9%)	30 (8.7%)	9 (11.1%)		

Discussion

Nursing students at the University of Medicine and Pharmacy at Ho Chi Minh City have medium excitement about their nursing major. Most of the student body has a medium level of excitement in their primary (73.8 per cent). This outcome is similar to the results of two previous types of research in Vietnam by Hang (6) and Thai (7), which concluded that the

majority of students have medium excitement in their nursing major. This can be explained by the characteristics of Vietnamese students, the characteristics of the job, the method of nurse training in Vietnam, and the use of a similar questionnaire. These results are also different from those of several foreign researchers. According to Zhang et al., 53.3 per cent of students have a positive attitude toward the

major of nursing (8). Similarly, Ali Noruzi Koushali's research reported that 65.4% of students are positively interested in studying the nursing profession (9). This result could be attributed to foreign nursing universities' efforts to improve their environment, teaching methods, etc. From the results above, it is shown that students with a nursing major in Vietnam, in general, and those at the Ho Chi Minh City University of Medicine and Pharmacy, are yet to be highly excited about their major. This will significantly impact students' current learning; in the long run, it will also affect the quality of their future careers.

Comparing the high level of excitement in nursing majors among first-year students and sophomores versus the high level of excitement among juniors and seniors, the results indicate that first- and second-year students have a greater rate of high excitement than juniors and seniors. This result can be attributed to the stress that they experience during clinical practice. According to international research, nursing students in clinical settings commonly face moderate to severe stressors (10-11). In documents, clinical stressors in nursing students include as follows: taking care of dying and terminal patients (11-12), lack of clinical knowledge and skills, clinical dishonesty, fear of mistakes, interpersonal conflicts, fear of new clinical situations, and heavy workloads (13-14). This result shows that for students to quickly adapt and become more confident in the hospital environment, they must be prepared with essential knowledge, skills of nursing, students' psychology before clinical practice, and methods of dealing with stress and pressure during the learning process.

According to a study by Rabia Allari, more than half of the students enrolled in the nursing faculty because of their grades in the foundation year (15). As for the results of Jrasat, 96% of the participants started nursing because of family wishes or economic reasons (16). On the other hand, from the results of this study, it is shown that the reason that motivates students to study nursing is that it is easy to get a job after graduation (28.36%). Similar to Mkala and Betty's study in 2013, most students said that they chose to study nursing due to job security and guaranteed employment at any time (17). Since the need for human health care is increasing, this result is logical. Our country's human resources in the health sector, in general, and the nursing business, in particular, must be strengthened. As a result, nursing students will have many job opportunities after graduation. Additionally, students can work abroad in nations such as Germany, Japan, and many others, since these countries are severely short on medical personnel.

According to Kate et al., several factors can influence nursing as a career choice: the image of the nursing profession, including stereotypes depicted in the media, and the public perception of the personal attributes required for nursing (18). In this study, society's assessment of the profession was not related to students' excitement about their major ($r = 0.866$, $p = 0.929$). This is possible because the nursing department of Ho Chi Minh City University of Medicine and Pharmacy has made efforts to improve nurses' image.

The most important objective factor is the opportunity to apply for a job. This is consistent with the reason for studying nursing in the first place: it is easy to get work after graduation. In addition, the working environment and income level also significantly impact students' excitement. It can be seen that the attractiveness of the profession in the future is an essential factor in increasing students' excitement about nursing. The most critical subjective factor relating to students' excitement in the major of nursing is understanding the role and responsibilities of a nurse. If students can understand the meaning, the work, the role, and the importance of this profession, they will feel the need for work. This will increase students' excitement about the nursing major. In addition, the passion for the profession is an important reason for students' excitement. If there is no passion for the profession, students are less likely to have the proper motivation for learning and learning actively. Therefore, they are unlikely to feel highly excited about their major. From the results above, the school can better understand the factors relating to students' excitement in nursing majors and devise a strategy to increase their excitement.

The study found no relationship between gender, residence, religion, and academic performance with nursing student excitement. Only the school year factor was related to the student's excitement about the nursing major. This is appropriate because students' excitement will be formed and developed through the training process. Similar to Hang's study in 2007, there has been a change in the excitement regarding majors among students over the years toward an increasing direction (6). However, the research also found that students who used to have a high level of excitement tended to decrease their excitement over the year: with the highest rate of excitement in the first year that gradually decreased over the 2nd year, then dropped sharply in the third year, and slightly improved in the fourth year. It can be explained that: first-year students have the highest level of excitement because they enter the school with enthusiasm and are not fully aware of the profession's challenges. Second-year students have a lower excitement rate than the 1st year students because this academic year prepares them with the necessary knowledge to process clinical internships at the hospital. Therefore, second-year students are more likely to experience a decrease in excitement due to pressure and stress in the learning process. In the third academic year, when students enter a new learning environment, a clinical internship at a hospital has the lowest excitement among nursing majors. This is possible because students are confused and unfamiliar with the environment at the hospital. However, the rate of high excitement in the fourth year is higher than in the third year. Since fourth-year students have completed clinical internships in various hospital settings, they are familiar with the nursing job. In addition, fourth-year students gain a wealth of theoretical knowledge, clinical skills, and experience through internships in these facilities. As a result, they become more confident in themselves. According to the results, the researcher found that the university should

hold sharing and connecting sessions with students at the beginning of each school year to easily adjust to the upcoming academic journey.

There are some weaknesses to this study that should be discussed: this research only evaluates the level of student excitement in the nursing major, but it has not assessed the level of awareness, emotion, and learning behaviour. Since this is descriptive cross-sectional research, the change in the excitement in the nursing major during the learning process cannot be observed. As a result, we propose new research that will provide a more precise and more detailed assessment of nursing students' awareness, emotional, and learning behaviour; in addition, the research will also track students' level of excitement in the nursing major, the change in the learning process, and propose methods of adjustment for students promptly.

Conclusion

The results on nursing students' excitement at the University of Medicine and Pharmacy at Ho Chi Minh City achieved a medium level. The top significant aspects determining students' excitement in the major of nursing are the attractiveness of the future profession, understanding of the role and responsibilities of a nurse, and the profession's passion.

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