Nursing Students' Perception of Learning Environment in different Colleges of Pokhara

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ABSTRACT

Introduction: The learning environment of nursing campuses is a significant factor in determining the success of nursing students in achieving academic excellence and qualities of nursing care delivery. This study was aimed to assess the nursing students perception of learning environment in different nursing colleges.

Methods: The cross sectional institutional based study was carried out among bachelor level nursing students of selected nursing colleges of Pokhara from Jan 01 to 23/2022. The purposive sampling technique was used. The data was collected through a structured validated tool Dundee Ready Education Environment Measure (DREEM) inventory. Descriptive statistics (percentage, mean, SD) and inferential statistics one-way (ANOVA) at the level of 0.05% was used to find out the difference in the score of the perception of learning environment and subscales of DREEM across the selected demographic variables.

Results: This study found that 85.4 % nursing students perceived their learning environment more positive than negative and only (1.5%) students perceived excellent learning environment in their college. The significant differences was found between the years of enrolment for the overall perception of the learning environment and the five subscales of learning environment ($p<0.05$) respectively. The multiple linear regressions revealed no statistically significant difference between specific factors and students perception on their learning environment ($p>0.05$).

Conclusions: The nursing students perception on their learning environment was more positive than negative. Even though no significant differences were detected for specific factors in their learning environment, it might be affected by other factors. So to make learning environment of nursing colleges more attractive and excellent close intrusion, monitoring and evaluation of others factors are needed.

Keywords: Perception, learning environment, nursing students, associated factors

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INTRODUCTION

Learning environment is an integral factor for the successful learning of students and for the work places as well as in career development.[1] Learning environment of the university is any activity which takes place within the teachers room, campus, or classrooms to facilitate students learning. The learning environment assessment improves students learning and it is compulsory to maintain the standard high for the quality education in any schools or universities.[2,3] Learning environment of the universities is one of the most essential factors to determine the academic achievement of the students and success of an effective curriculum.[4,5] For the nursing students, educational environment should enhance for critical thinking and lifetime knowledge with various ways. There are several factors that influence learning and also affected by their

motivation and perception of its importance.

Learning environments in nursing students involves both practical and theoretical education. Factors like support system, learning facilities; memory status, motivation, satisfaction, academic status, marital status affects students learning process. Many studies were conducted internationally in nursing and different disciplines and few studies were conducted in the Nepalese context. The objectives of this current study were to identify the perception of nursing students about their learning environment.

METHODS

Descriptive cross sectional study design was conducted in Pokhara Nursing Campus and Gandaki Medical College, Pokhara, Nepal. Data was collected from 205smaple of bachelor-level nursing students (Bachelor of Nursing Science and Bachelor of Science in Nursing). Complete enumeration was taken for the samples with inclusion criteria. Data collection was done by self-administered questionnaire which consisted of two parts. The first part consisted of socio-demographic information of participants. The second part consisted of Dundee Ready Education Environment Measure (DREEM) inventory tool developed by Roff et al.[6] English version was used for the data collection. . It consisted of 50 items, which were grouped into five subscales: Students perceptions of learning (12 items), Students perception of teachers (11 items), Students academic self-perceptions (8 items), Perception of atmosphere (12 items), and Students social self-perception (7 items). Each item is scored on five point Likert scale consisting of "Strongly agree"= 4, "Agree"=3, "Unsure"= 2, "Disagree"= 1 and "Strongly disagree"= 0.

The score was reversed in item 4, 8,9,17,25,35,39, 48 and 50. The total score of DREEM ranges from 0200. The overall DREEM scores were interpreted as follows: 0– 50 = very poor, 51–100 = many problems, 101–150 = more positive than negative, 151–200 = excellent. The tool was freely available and used in medical and nursing field in Nepal.

Data was collected from the students willing to participate in the study during their break time. Before data collection, brief description of the study purpose was given to all participants and informed consent was obtained. Confidentiality was ensured by asking them not to write their names in the questionnaire. Chronbachs coefficient alpha for the total DREEM inventory (0.79) was used to assess the internal consistency reliability. Both descriptive statistics (percentage, mean, and SD) and inferential statistics (ANOVA and Multiple regressions analysis) were used.

Approval to conduct this study and ethical clearance were obtained from institutional review committee Tribhuvan University, Institute of Medicine, Maharajgunj, Kathmandu (Ref: 231[6-11] E^2/078/79).

RESULTS

Socio-demographic Characteristics

Out of 205 nursing students, 57.1% were from PNC and 42.9% from GMC. Among them, majority (66.3%) of the nursing students were between 21-25 years with mean age 23.2±2.5. More than fifty (59.5%) of nursing students were Brahmin/Chhetri and 55.2% of the nursing students were unmarried. Majority (89.8%) of the nursing students were Hindu and 79.5% of nursing students had average GPA (Table 1).

Table 1 : Socio-demographic Characteristics of the Nursing Students (n= 205)

Characteristics	Number	Percentage
Colleges		
PNC	117	57.1
GMC	88	42.9
Age (in completed years)		
or less	25	12.2
21-25	136	66.3
26-30	44	21.5
Mean± SD: 23.2± 2.5		
Ethnicity		
Brahmin/Chhetri	122	59.5
Janajati	61	29.8
Others (Pariyar/ Sunar/Nepali/ Madeshi/Tharu)	22	10.7
Marital Status		
Unmarried	96	46.8
Married	109	53.2
Religion		
Hindu	184	89.8
Buddhist	17	8.3
Christian	3	1.5
Muslim	1	0.5
Family Income Status		
Just sufficient for a year	160	78.0
More than sufficient for a Year	43	21.0
Not sufficient for a Year	2	1.0

Majority of nursing students (63.9%) completed their high school from non-governmental school. Highest number of the nursing students enrolment was 27.8% in BNS third year. Among them, 43.9% of the nursing students accommodation was in college hostel and 78.0% of the nursing students economic status was just sufficient for a year (Table 2).

Table 2 : Academic Information of the Nursing Students (n=205)

Characteristics	Number	Percentage
High School		
Government School	74	36.1
Non-Government school	131	63.9
Year of Enrolment		
BSc Second Year	30	14.6
BSc Third Year	39	19.0
B.Sc. Fourth Year	45	22.0
BNS Second Year	34	16.6
BNS Third Year	57	27.8
Nature of Accommodation		
In the College Hostel	90	43.9
Outside the hostel	53	25.9
At own Home	62	30.2
Class Grading Point (GPA)		
High	41	20.0
Average	163	79.5
Low	1	0.5

More than fifty (53.2%) of nursing students memory status was good and they can remember all things as per need and 65.9% of the nursing students were satisfied with their teaching learning process in their college. Meanwhile, 55.1 % of the nursing students stated that there is not adequate teaching learning facilities, lack of good support system for stressed nursing students (67.8%) and motivational activities (75.6%) in their college (Table 3).

Table 3 : General Information about College Facilities (n=205)

General Information	Number	Percent
Able to Remember all things as need- Yes	109	53.2
Satisfied with Teaching/Learning Process- Satisfied	135	65.9
Teaching/Learning Facilities in the College- Not adequate	113	55.1
Good Support System for stressed students in the College- No	139	67.8
Motivational Activities in the College- No	155	75.6

Overall perception mean score of learning environment was 126±18.2. The students perception of learning subscale has the highest score 48 with the mean score of 32.2 ±6.3 among other subscale (Table 4).

Table 4 : Mean Score of Perception of Learning Environment and its Subscales (n=205)

Statements	Mean± SD	Minimum Score	Maximum score
Total score	126.5±18.2	56.00	173.00
Students perception of learning (48)	32.2±6.3	11.00	48.00
Students perception of teachers (44)	27.4±4.8	8.00	37.00
Students academic self-perception (32)	21.9±4.4	8.00	31.00
Students perception of atmosphere (48)	28.7±5.8	8.00	44.00
Students social self-perception (28)	16.2±3.4	7.00	26.00

On the individual items analysis, the nursing students perception on learning subscale, mean scores was higher (3.01±0.78) on the aspects of learning helps to develop confidence whereas less (2.03±1.17) on aspects of learning is too teacher centered (Table 5).

Table 5 : Mean Score of the Respondents on Perception of Learning (n=205)

Perception of Learning (48)	Mean±SD
I am encouraged to participate in teaching sessions	2.88 ±0.99
The teaching is often stimulating	2.69±0.78
The teaching is student centered	2.57±1.11
The teaching helps to develop my competence *	2.90±.90
The teaching is well focused	2.91±0.82
The teaching helps to develop my confidence	3.01±0.78
The teaching time is put to good use	2.84±0.83
The teaching over-emphasizes factual learning *	2.3±1.05
I am clear about the learning objectives of the course *	2.3±1.05
The teachers encourages me to be an active learner	2.92±0.90
Long term learning is focused	2.40±0.98
The teaching is too teacher centered	2.03±1.17

*Reverse scoring

On the individual items analysis, the nursing students perception on teaching subscale, mean scores was higher (3.17±0.89) on the aspects of teachers are knowledgeable whereas less on aspect of teaching is irritates the teachers. Among items of academic self–perception scale, students mean scores were higher (3.01±0.81) on aspects of learned a lot about empathy in my profession whereas less mean score (2.31±1.06) was observed on aspect of learning strategies which worked for me before continue to work for me now (Table 6).

Table 6 : Mean Score of Respondents Perception of Teachers and Academic self-Perception (n=205)

Perception of Teachers(44)	Mean±SD
The teachers are knowledgeable	3.17±0.89
The teachers are patient with students	2.87±0.99
The teachers ridicule their students	1.77±1.01
The teachers are authoritarian	2.45±0.99
The teachers are good at providing feedback to students *	2.92±0.93
The teachers provide constructive criticism	2.50±1.00
The teachers give clear examples	2.83±0.97
The teachers get angry in teaching sessions	1.96±1.17
The teachers are well prepared for their teaching sessions.	2.82±1.02
The students irritates the teachers	1.32±1.15
Academic Self-Perception (32)	
Learning strategies which worked for me before continue to work for me now	2.31±1.06
Confident about passing this year	2.80±0.97
Feel I am being well prepared for my profession	2.8±1.08
Last year's work has been a good preparation for this year's work	2.74±0.93
Able to memorize all I need	2.34±0.99
Learned a lot about empathy in my profession	3.01±0.81
Problem solving skills are being well developed here	2.95±0.83
Much of what I have to learn seems relevant to in health care profession	2.96±0.88

*Reverse scoring

Among items of nursing students perception on atmosphere subscale mean scores were observed higher (2.90±0.77) in the items of feel comfortable in class socially whereas lower in the item related to cheating is a problem in this school. Among items of nursing students perception on self-social perception subscale, the mean scores was observed higher (3.01±0.95) items have good friends in this school whereas lower (1.87±1.21) in the item there is a good support system for students who get stressed (Table 7).

Table 7 : Mean Score of Respondents Perception of Atmosphere and Self Perception (n=205)

Perception of Atmosphere(48)	Mean±SD
The atmosphere is relaxed during teaching	2.12±1.14
The course is well timetabled	2.19±1.21
Cheating is a problem in this school	1.60±1.22

The atmosphere is relaxed during lectures	2.40±1.14
There are opportunities for me to develop interpersonal skills *	2.74±0.94
Feel comfortable in class socially	2.90±0.77
The atmosphere is relaxed during seminars/tutorials	2.54±1.00
Find the experience disappointing	1.80±1.08
The enjoyment out weights the stress of the course *	2.62±0.87
Able to concentrate well	2.62±0.87
The enjoyment out weights the stress of the course	2.28±1.05
The atmosphere motivated me as a learner	2.70±0.78
I feel able to ask the questions I want	2.80±1.00
Self-Social Perception (28)	
There is a good support system for students who get stressed	1.87±1.21
I am too tired to enjoy the course	2.03±1.05
Rarely bored in this course	1.99±1.01
Have good friends in this school	3.01±0.93
My social life is good *	2.6±1.03
I seldom feel lonely	2.16±1.14
Accommodation is pleasant * *Reverse scoring	2.4±1.05

Nursing Students' Perception Level on Learning Environment

Most (85.4%) of nursing students perceived their learning environment in their college was more positive than negative with mean score (116.10±13.20) (Table 8).

Table 8 : Nursing Students' Perception Level on Learning Environment (n=205)

Perception Level	Number	Percent
Many Problems (51-100)	27	13.2
More Positive than Negative (101-150)	175	85.4
Excellent (151-200)	3	1.5
Mean±SD	116.10±13.20	
Maximum Score	152	
Minimum Score	62	

There were significant differences between the year of enrolment and overall perception score of the learning environment and the five subscales of learning environment ($p < 0.05$) respectively except for the subscale perception of atmosphere (Table 9).

Table 9 : Comparison of Classes According to Different Perception Level of Nursing Students (n=205)

	B.Sc.			BNS		F Value	P value
	Second	Third	Fourth	Second	Third		
Total perception Score	124.3±15.0	123.8±18.3	131.9±14.3	134.8±19.3	120±19.5	5.05	.001
Students perception of learning (48)	32.1±5.2	31.9±6.8	34.1±5.1	34.6±6.3	29.7±6.4	4.88	.001
Students perception of teachers (44)	27.0±2.8	26.7±5.2	28.8±4.0	29.0±4.8	25.9±5.5	3.63	.007
Students academic selfperception (32)	19.7±3.8	21.5±4.4	23.5±4.1	23.1±4.1	21.2±4.5	4.3	.002
Students perception of atmosphere (48)	28.5±5.3	28.6±5.5	29.5±4.7	30.4±5.6	27.2±6.8	1.9	1.0
Students social self- perception (28)	16.7±3.0	15.1±3.3	15.8±2.8	17.5±3.5	16.2±3.9	2.5	.039

a. One way ANOVA , $p = <0.05$.

DISCUSSION

This cross- sectional descriptive study conducted in 205 bachelor level nursing students among which 57.1% were from PNC and 42.9% from GMC. Majority of nursing students (66.3%) were between 21- 25 years with mean age 23.2±2.5. More than fifty (59.5%) of the nursing students were Brahmin/Chhetri and 55.2% of were unmarried. Majority (89.8%) of the nursing students were Hindu, 79.5% had average GPA, and 63.9% had done high school schooling from non- governmental schools. Majority of the nursing students (27.8%) were from BNS third year, 43.9% were staying in college hostel, and 78% of the nursing students economic status was satisfactory.

Regarding general information about college facilities, majority of the nursing students (65.9%) were satisfied with teaching learning process in the college and 67.8% stated that there is good support system for stressed nursing students. In contrary, 55.1% % of

nursing students stated that there is not adequate teaching learning facilities and 75.6% stated that there are no motivational activities in their college.

The present study findings revealed that the mean score of overall perception of learning environment was 126±18. Among the five subscales, item „student s perception of learning has the highest score 48 with the mean score of 32.2 ±6.3 while the subscale social self-perception has the lowest score 26 with the mean score 16.23±3.4. Similar study done in Srilanka[7] and Iran[8] revealed that the highest mean score was related to student s perception of learning while the lowest one was students social self-perception. The mean score analysis of each item showed that only four items scored 3.0 or >3.0. Similar finding was seen in the study conducted in eastern Nepal in which none of the items scored more than 3.5 and scores of six items were <2.0. The mean scores of the majority of the items were between 2.0 and 3.0.[5]

The study findings showed that mean score of nursing student s perception level on learning environment was 116.10±13.20 and majority of nursing students (85.4%) perceived their learning environment in their college was more positive than negative which is consistent with various studies done worldwide.[7,8,9, 10,11]

This study revealed significant differences between years of enrolment and overall perception level of the learning environment and the five subscales of learning environment (p <0.05) except the subscale perception of atmosphere which is consistent with the study done in eastern Nepal.[11.] The study done in Tehran, Iran also showed that all the domains were statistically significant except the perception of learning and educational atmosphere (p<0.001).[8]

CONCLUSIONS

The present study concluded that majority of nursing students pronounced more positive perception on learning environment. There were significant differences in year of enrolment and overall perception level of nursing students. The score for subscales students perception of learning, academic self-perception and self- social perception also varied significantly between the years of enrolment except the teaching and atmosphere. So close monitoring and continuous evaluation is needed to make learning environment of nursing colleges more conducive.

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