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Perception of Nursing Students toward Academic Learning Environment in a College of Kathmandu

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ABSTRACT

Introduction

A supportive and systematic design of academic learning environment has been important for transfer of learning in clinical context, can lead to positive outcomes for graduates and best prepares for professional life. The objective of this study was to find out the perception of nursing students toward academic learning environment.

Methods

The descriptive, cross sectional study design was used among 172 proficiency certificate level (PCL) nursing students at Maharajgunj Nursing Campus, Kathmandu Nepal. The data were collected by using Dundee Ready Education Environment Measure (DREEM) Inventories with complete enumeration technique which was developed by Roff et al (1997). Data were analyzed using descriptive and inferential statistics.

Results

Overall mean score of academic learning environment was found 142.78 out of 200 for 50 items which was in the ranged for 'positive' learning environments. The total mean score for perception of learning was 34.4 out of 48; for perception of teacher 30.7 out of 44; for academic self-perception 25 out of 32; for perception of atmosphere 33.3 out of 48; for social self-perceptions 19.3 out of 28. Mean scores indicated that students' rated all five dimensions of the educational environment in this institution as an average. The significant differences were found between overall mean score; mean score of teachers, academic self-perception & social self perception of students and different academic year.

Conclusion

The overall mean DREEM scores indicate a more positive academic learning environment. Although the overall learning environments score of this institution observe as an average, none of the items represents 'excellent' score or real positive academic learning environment.

Keywords: *Academic learning environment, nursing students, perceptions*

INTRODUCTION

In nursing education, the learning environment has to be integrated between theory and clinical practice for enhancement of better knowledge acquisition, skills development and encourage motivation to obtain balanced quality learning outcomes¹.

Nursing education has now become a

marketable commodity. The reformation of the traditional nursing education system and the integration with higher education is suggested to achieve theoretical skills and clinical practice. The 'ideal' academic learning environment may be defined as one that best prepares students for their future professional life and contributes towards their personal

development, psychosomatic and social well-being².

An ideal or positive academic environment enables students for acquisition of necessary diversified theoretical, clinical and interpersonal competences with variety of stimuli to broaden the horizons of nursing students' learning². Students' perception of their current learning environment is even a stronger predictor of learning outcomes at a university than their prior achievements so need to paid particular attention in psychosocial & emotional for needs productive learning in nursing education¹. The stress experienced in a nursing school environment can be the precursor of 'burnout' later in professional life⁴.

So it is fundamental to understand the students' perception and overall learning

experience as well as 'positive academic learning environment' in order to bring improvement on the learning environment for the academic success².

METHODS

Descriptive cross-sectional study was conducted in April, 2015 at Maharajgunj Nursing Campus, Institute of Medicine, Tribhuvan University, Kathmandu Nepal. Target populations of the study were the PCL first, second and third year nursing students. The sample was collected by researcher themselves with complete enumeration technique, the semi structure self administered questionnaire were distributed for 180 students in the class room at the end of academic session but returned only 172. Dundee Ready Education Environment Measure (DREEM) inventory tool which

Table 1: Socio demographic Information of Respondents (n= 172)

| Variables | Frequency | Percentage |
|----------------------------------|-----------|------------|
| Ethnic Group | | |
| Brahmin & Chhetri | 70 | 40.6 |
| Newar | 55 | 32.0 |
| Janajati & Madheshi | 47 | 27.3 |
| Religion | | |
| Hindu | 150 | 87.2 |
| Buddhist | 20 | 11.6 |
| Christian | 2 | 1.2 |
| Regularly lived in Hostel | 167 | 97.1 |

containing an international, culturally non-specific, generic instrument, encompass five subscales, total 50 statements with maximum score 200 was developed by Roff et al (1997) was used. Formal permission from respective institution and informed consent from each respondent were obtained prior to data collection, anonymity and confidentiality was maintained through the study. Collected data were analyzed by using SPSS version 16 and interpreted on the basis of research objectives by using descriptive and inferential statistics.

RESULTS

Table 1 revealed that the mean (\pm SD) age of students were 18.5 (\pm 1.05) ranges from 16 to 21 years, 40.6% from Brahmin & Chhetri ethnicity; religion wise 87.2% were Hindu, 65.7% came from central development region & 64.5% from urban areas. Almost all (97.1%) students were regularly lived in hostel. About

the obtain score 60% in first, 53.58% in second and 61.54 % in third year students secured 70% to 80% in each academic session and only 10.5% students got the scholarship from different organization.

Table 2 showed that, the overall mean scores for academic learning environment was 142.78 out of 200 for the 50 items, this was in the range for 'positive' rather than 'negative', minimum score was 105 and maximum 181. Since "a mean score of 3.5 and over represent the real positive points for learning environment," and the mean score 2 and less represents as 'negative' rather than 'positive' or views as problem area examine more closely, none of the items in this study achieved the score toward real positive learning environment.

Table 3 illustrated that total mean score for student's perception of learning was 34.4 out of 48, the highest obtained score was 43

Table 2: Areas for the Secured Score of Students for Academic Learning (n=172)

| Sub Scale | Areas of Scoring | Secured Score | | | Total Score |
|--|--------------------------|----------------|-----|-----|-------------|
| | | Mean (SD) | Min | Max | |
| Overall Score on Academic Learning Environment | | 142.78 (11.64) | 105 | 181 | 200 |
| 1. | Perception of Learning | 34.48 (3.49) | 23 | 43 | 48 |
| 2. | Perception of Teachers | 30.68 (3.08) | 20 | 40 | 44 |
| 3. | Academic Self-Perception | 24.99 (3.16) | 16 | 32 | 32 |
| 4. | Perception of Atmosphere | 33.26 (3.74) | 23 | 45 | 48 |
| 5. | Social Perception | 19.34 (2.02) | 10 | 26 | 28 |

Table 3: Sub Scale I: Scoring for Student's Perception of Learning (N=172)

| SN | Student's Perception of Learning | Different Year Mean Score | | | | INTERPR ETATION |
|--------------------|---|---------------------------|-------------|--------------|-------------|--------------------|
| | | First | Second | Third | Overall | |
| 1. | The teaching over emphasizes factual learning | 2.08 | 1.95 | 2.23 | 2.08 | PA-EMC |
| 2. | The teaching is student centered | 2.95 | 3.1 | 2.73 | 2.94 | CBE |
| 3. | The teaching encourages me to be an active learner | 3.07 | 3.28 | 3.12 | 3.16 | CBE |
| 4. | The teaching is sufficiently concerned to developed my confidence | 3.05 | 3.12 | 2.94 | 3.04 | CBE |
| 5. | The teaching is to teacher centered | 2.62 | 2.75 | 2.63 | 2.67 | CBE |
| 6. | The teaching time is put to good use | 2.83 | 2.92 | 2.73 | 2.83 | CBE |
| 7. | Long term learning emphasizes over short term | 2.77 | 2.83 | 2.86 | 2.82 | CBE |
| 8. | The teaching is well focused | 2.67 | 2.98 | 2.85 | 2.83 | CBE |
| 9. | I am encouraged to participate in class | 2.95 | 3.17 | 3.02 | 3.05 | CBE |
| 10. | I am clear about learning objectives of the courses | 2.93 | 3.05 | 3.19 | 3.05 | CBE |
| 11. | The teaching is sufficiently concerned to develop my competence/skill | 2.9 | 3.08 | 3 | 2.99 | CBE |
| 12. | The teaching is often stimulating/exciting | 2.85 | 2.97 | 3 | 2.94 | CBE |
| Total Score | | 33.67 | 35.2 | 34.31 | 34.4 | TVP |

Table 4: Sub Scale II Scoring for Student's Perception of Teachers (N=172)

| SN | Student's Perception of Teachers | Different Year Mean Score | | | | INTERPR ETATION |
|--------------------|---|---------------------------|--------------|--------------|-------------|--------------------|
| | | First | Second | Third | Overall | |
| 13. | The teachers provide constructive criticism | 2.52 | 2.42 | 2.62 | 2.51 | CBE |
| 14. | The teachers are good at providing feedback to students | 3 | 3.1 | 3 | 3.03 | CBE |
| 15. | The teachers ridicule the students | 2.5 | 2.68 | 2.54 | 2.58 | CBE |
| 16. | The teachers give clear examples | 2.95 | 3.15 | 3.09 | 3.06 | CBE |
| 17. | The teachers are patience with patients | 2.97 | 3.77 | 3.04 | 3.27 | CBE |
| 18. | The teachers have good communication skills with patients | 3.22 | 3.27 | 3.19 | 3.23 | CBE |
| 19. | The teachers get angry in class | 2.17 | 2.55 | 2.29 | 2.34 | CBE |
| 20. | The students irritate the teachers | 2.4 | 2.78 | 2.31 | 2.51 | CBE |
| 21. | The teachers are well prepared for their classes | 3 | 3.12 | 2.83 | 2.99 | CBE |
| 22. | The teachers are authoritarian/rigid | 2.07 | 2.13 | 2.12 | 2.1 | CBE |
| 23. | The teachers are knowledgeable | 3.13 | 3.22 | 3.19 | 3.18 | CBE |
| Total Score | | 29.92 | 32.18 | 30.21 | 30.7 | P>N |

Table 5: Sub Scale III: Scoring for Student's Academic Self-Perception (N=172)

| SN | Academic Self-Perception | Different Year Mean Score | | | | INTERPR- ETATION |
|--------------------|--|---------------------------|-------------|--------------|-------------|---------------------|
| | | First | Second | Third | Overall | |
| 24. | I am able to memorized all I need | 3.15 | 3.22 | 3.19 | 3.19 | CBE |
| 25. | My problem solving skill are being well developed here | 3.0 | 3.03 | 3.25 | 3.09 | CBE |
| 26. | Feel I am being well prepared for my profession as its slandered | 3.02 | 2.97 | 3.06 | 3.01 | CBE |
| 27. | Learning strategies which worked for me before continue to work for me now | 2.82 | 2.9 | 2.96 | 2.89 | CBE |
| 28. | I am confident about my passing this year | 3.15 | 3.38 | 3.36 | 3.3 | CBE |
| 29. | I have learned a lot about empathy in my profession | 3.13 | 3.48 | 3.29 | 3.3 | CBE |
| 30. | Last year's work has been a good preparation for this year's work | 2.88 | 3.13 | 3.29 | 3.09 | CBE |
| 31. | Much of what I have to learn seems relevant to a career in health care | 2.95 | 3.28 | 3.15 | 3.13 | CBE |
| Total Score | | 24.1 | 25.4 | 25.56 | 25.0 | FPS |

from one and lowest 23 from two students, that represents the teaching viewed as more positively (TVP) than negatively but none of item represent real positive environment. All items except items 1 secured the mean score between 2 to 3 indicated as an average that was viewed as "aspect of the climate that could be enhanced (CBE)", the mean scores 1.95 item 1 in this domain was the lowest mean score seem as problem area examine more closely (PA-EMC).

Table 4 represents the total mean score of student's perception of teacher was 30.7 out of 44, represents a more 'positive' perception toward the teachers than 'negative' (P>N). The

highest obtained score was 40 from two and minimum score 20 from one students. All items secured the average (between 2 to 3) mean score that was viewed as "aspect of the climate that could be enhanced (CBE)", but none of the item represents the real positive environment.

Table 5 revealed that the total mean score of student's academic self-perception was 25 out of 32, represented a feeling more on 'positive' side (FPS) than negative but none of the item represents the real positive environment. The highest obtained score was 32, from 3 and lowest 16 from 4 students. All items mean score secured with in an average from

Table 6: Sub Scale IV: Scoring for Student's Perception of Atmosphere (N=172)

| SN | Perception of Atmosphere | Different Year Mean Score | | | | INTERPR- ETATION |
|--------------------|---|---------------------------|--------------|--------------|-------------|---------------------|
| | | First | Second | Third | Overall | |
| 32. | The enjoyment outweigh the stress of the course | 2.93 | 2.53 | 2.81 | 2.76 | CBE |
| 33. | Cheating is a problem in this school | 2 | 2.1 | 2.08 | 2.06 | PA-EMC |
| 34. | This college follows well time-table | 2.67 | 2.9 | 2.71 | 2.76 | CBE |
| 35. | The atmosphere motivates me as learners | 2.83 | 3.08 | 2.94 | 2.95 | CBE |
| 36. | I feel able to ask the question I want | 2.68 | 2.9 | 2.85 | 2.81 | CBE |
| 37. | There are opportunities for me to develop interpersonal skill | 3.15 | 3.42 | 3.04 | 3.21 | CBE |
| 38. | I am able to concentrate well | 2.77 | 2.75 | 2.81 | 2.77 | CBE |
| 39. | The atmosphere is relax during the ward teaching | 2.52 | 2.5 | 2.63 | 2.55 | CBE |
| 40. | The atmosphere is relax during the lecture | 2.65 | 2.92 | 2.75 | 2.77 | CBE |
| 41. | I find the experience disappointing | 2.75 | 2.78 | 2.85 | 2.79 | CBE |
| 42. | The atmosphere is relax during the seminars/tutorials | 2.82 | 2.87 | 2.87 | 2.85 | CBE |
| 43. | I feel comfortable in class socially | 2.85 | 3.08 | 3.02 | 2.98 | CBE |
| Total Score | | 32.62 | 33.83 | 33.35 | 33.3 | MPA |

Table 7: Sub Scale V: Scoring for Student's Social Self Perception (n = 172)

| SN | Social Self Perception | Different Year Mean Score | | | | INTERPR- ETATION |
|--------------------|---|---------------------------|--------------|--------------|--------------|---------------------|
| | | First | Second | Third | Overall | |
| 44. | There is a good support system for student who get stressed | 2.58 | 2.52 | 2.58 | 2.56 | CBE |
| 45. | I am rarely bored on this course | 2.65 | 2.65 | 2.52 | 2.61 | CBE |
| 46. | I am too tired to enjoy the course | 2.22 | 2.33 | 2.46 | 2.33 | CBE |
| 47. | I seldom feel lonely | 2.67 | 2.52 | 2.61 | 2.6 | CBE |
| 48. | My social life is good | 3.02 | 3.08 | 2.96 | 3.02 | CBE |
| 49. | I have a good friends in this school | 3.1 | 3.2 | 3.16 | 3.14 | CBE |
| 50. | My accommodation is pleasant | 2.97 | 3.13 | 3.13 | 3.08 | CBE |
| Total Score | | 19.2 | 19.43 | 19.38 | 19.30 | MP-SLE |

academic self-perception that was viewed as “aspect of the climate that could be enhanced (CBE)”.

Table 6 illustrates the total mean score for student’s perception of atmosphere was 33.3 out of 48, the highest score was 45, from two and minimum score 23 from one students, which represented a more positive atmosphere (MPA). Perception of the learning environment of atmosphere was viewed as “aspect of the climate that could be enhanced (CBE)”.

Table 7 revealed that total mean score for student’s social self perception was 19.3 out of 28, the highest secured score was 26 and lowest 10 from 1/ 1 student respectively, which represent a more ‘positive’ perception of the social learning environment (MP-SLE). But none of the item represents the real positive environment.

DISCUSSION

The overall mean score of academic learning environments of PCL nursing students was 142.78 out of 200 for the 50 items. This score was observed as an average, in the range for ‘positive’ rather than ‘negative’ learning environments. None of the items represented

‘excellent’ score that means the real positive environment or unable to secure mean score 3.5 & above so all items had aspects of the learning environment climate that could be enhanced. Student perceptions of learning, teachers, academic self, social self and the atmosphere were all positive, the highest mean score was 3.38 (item 28) and the lowest mean score 1.95 (item 1) in subscale I. A Study conducted by Said, Rogayah & Hafizah (2009) in Malaysia reported the overall mean DREEM scores for Bachelor of Nursing students was 120.¹², range for ‘positive’ rather than ‘negative’ learning environments. The highest mean score was 3.18 (item 2), and the lowest mean score was 1.56 (item 12). Only three items had a real positive perception, 39 items had aspects of the learning environment climate that could be enhanced from the respondents’ point of view.

About student’s perception of learning, the total mean score was 34.4 out of 48, the highest score was 43 and lowest 23, the teaching viewed as more positively (TVP) than negatively but none of the item represent the real positive environment. All items except items 1 secure mean score between 2 to 3 that was viewed as “aspect of the climate

that could be enhanced (CBE)”, the item 1 had mean scores 1.95 seem as problem area examine more closely (PA-EMC). A Study by Said, Rogayah, & Hafizah (2009) in Malaysia founded mean score for perception of learning was 28.54/ 48 the highest score was 31.43, represented a ‘positive’ perception of the learning environment, similarly Al-hazimi, Al-hyani & Roff (2004) also found mean total score was 22/48 in Saudi Arabia.

The mean score of student’s perception of teacher was 30.7, the highest score 40 and lowest 20 out of 44, represented a more ‘positive’ perception toward teachers than ‘negative’, but none of the item represents the real positive environment which viewed as “aspect of the climate that could be enhanced (CBE)”. Study conducted by Said, Rogayah & Hafizah (2009) in Malaysia suggested a favorable impression of their teachers by the respondents. Another study conducted in India by Mayya & Roff (2004) found the mean score 24.57/44 for perceptions of teachers, indicated average score in various items.

Regarding student’s academic self-perception the mean score was 25, the highest 32 and lowest 16 out of 32, revealed a feeling more

on ‘positive’ side (FPS) than negative but none of the item represents the real positive environment, viewed as “aspect of the climate that could be enhanced (CBE)”. Study conducted by Said, Rogayah & Hafizah (2009) in Malaysia founded the overall mean scores academic self-perception was 19.42, another study by Mayya & Roff (2004) in India found the mean score 17.98/32 (SD = 5.08) and In Saudi Arabia By Al-Hazimi, Al-hyani & Roff (2004) found mean total score was 17/32.

The mean score for student’s perception of atmosphere was 33.3, the highest score 45 and lowest 23 out of 48, that represent a more positive atmosphere (MPA) but viewed as “aspect of climate that could be enhanced (CBE)”. Study conducted by Said, Rogayah & Hafizah (2009) in Malaysia revealed positive perceptions of the atmosphere; the total mean score was 27.78. Another study from Saudi Arabia by Al-hazimi, Al-hyani & Roff (2004) found the mean total score was 23/48 and the study by Shreemathi & Roff (2004) in India found the mean score 25.54/48 (SD = 7.61) for perceptions of academic atmosphere.

Regarding student’s social self perception mean score was 19.3, the highest 26 and

lowest 10 out of 28, that represent a more 'positive' perception of the social learning environment (MP-SLE) but none of the item represents the real positive environment. Study conducted by Said, Rogayah & Hafizah (2009) in Malaysia suggested the average social self-perceptions with the total mean of 16.23. Another study by Mayya & Roff (2004) in India found students unhappy in social environment, however overall the mean score was 14.32/28 (SD = 4.28), showed more positive than negative perceptions. The study in Saudi Arabia by Al-hazimi, Al-hyani & Roff (2004) found the mean total score 15/28 for social self perceptions.

CONCLUSION

On the basis of findings, overall mean DREEM scores of PCL nursing students showed an average academic learning environment, toward more positive rather than negative. Student perceptions of learning, teachers, academic self, social self and the atmosphere were all positive. None of items represented 'excellent' or real positive perception, so all items had aspects of the learning environment that could be enhanced. The scores on various scales of items indicated somewhat

negative aspect in their perceptions of learning environment. There were significant differences found between overall mean score, mean score of teachers, academic self-perception & social self perception of students' perceptions of academic learning environment and different academic year.

RECOMMENDATIONS

The overall academic learning environment was observed to be an average; none of the items represents 'excellent' score or the real positive environment in this organization. Planning in-service education, teacher student interaction program could enhance & creation more effective, conducive & real positive academic learning environment.

Focus group discussion may be organized to recognize and accept the negative viewpoints of the students, with regard to features of their learning environment more specifically which gave some guide for academician to plans specific action in order to provide a quality learning environment.

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CONFLICTS OF INTEREST

None declared.

REFERENCES

1. Said NM, Rogayah J, & Hafizah A. A Study of Learning Environments in the Kulliyah (Faculty) of Nursing, International Islamic University Malaysia. *Malays Journal of Medical Science*. 2009; Oct-Dec 16 (4): 15–24.
2. Divaris et al. The academic environment: the students' perspective. The American Dental Education Association. *European Journal of Dental Education*. 2008; 18 September; 12 (Suppl. 1): 120–130.
3. Terry, D. Evaluating Teacher Effectiveness —Research Summary. Center for Teaching, Learning and Faculty Development. 2004. Ferris State University.
4. Brammer J D. A phenomenographic study of registered nurses' understanding of their role in student learning--an Australian perspective. *International Journal of Nursing Students*. 2006; Nov, 43(8): 963-73. From <http://www.ncbi.nlm.nih.gov/pubmed/16360656>
5. Dimoliatis IDK, Vasilaki E, Anastassopoulos P, Ioannidis JPA, & Roff S. () Validation of the Greek Translation of the Dundee Ready Education Environment Measure (DREEM. *Education for Health*. 2010 April; Volume 23, issue 1. Available from: <http://www.educationforhealth.net/>
6. Mayya SS & Roff S. Students' Perceptions of Educational Environment: A Comparison of Academic Achievers and Under-Achievers at Kasturba Medical College, India. *Education Health*. 2004 17; 280-91.
7. Al-hazimi A, Al-hyiani A & Roff S. Perceptions of the Educational Environment of the Medical School in King Abdul Aziz University, Saudi Arabia. *Education for Health*. 2004; 26 (6): 570-573. Doi:10.1080/01421590410001711625)

8. Shreemathi SM & Roff S. Students' Perceptions of Educational Environment: A Comparison of Academic Achievers and Under-Achievers at Kasturba Medical College, India. *Education for Health*. 2004; November 17 (3): 280 –291.
9. Roff S, McAleer S, Harden RM, Al-Qahtani M, Uddin AA, Deza H, Groenen G, Primparyon P. Development and Validation of the Dundee Ready Education Environment Measure (DREEM). *Medical Teacher*. 1997; 19(4):295-299.