

# EMOTIONAL INTELLIGENCE AMONG UNDERGRADUATE NURSING STUDENTS IN SELECTED COLLEGES OF MORANG DISTRICT, NEPAL

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## ABSTRACT

### Introduction

Emotional Intelligence (EI) is the ability to recognize one's own and other's emotions and capacity to utilize the emotional information to adjust to the environment. Nurse with high EI is found to have a better interpersonal relationship, higher job satisfaction, better leadership abilities, and better academic achievement. There is a gap in information regarding EI in nursing students of Morang district.

### Objective

The objective of the study was to find out the emotional intelligence and its association with selected socio-demographic variables among undergraduate nursing students of selected colleges of Morang district, Nepal.

### Methodology

This was a cross-sectional study carried out from June 2020 to November 2020 among 423 undergraduate nursing students from three colleges of Morang district. Ethical clearance was obtained from Purbanchal University School of Health Sciences-Institutional Review Committee (PUSHS-IRC) and informed consent were taken from study participants. A standard tool, "The Schutte Self Report Emotional Intelligence Test (SSEIT)" was used. Data was collected through a google form. Univariate and bivariate analysis was performed. P-value <0.05 at 95% confidence interval was considered statistically significant for bivariate analysis.

### Result

Majority (75.4%) of nursing students had a high level of EI score and 24.6% of the students had a moderate level of EI score. There was no statistically significant association of total EI score with any of the selected demographic variables. Further, the selected domains such as perception of emotion with an academic year of study ( $p=0.02$ ), occupation of the mother ( $p=0.017$ ), management of other's emotions with a year of the study ( $p=0.018$ ), and utilization of emotion with the type of schooling ( $p=0.003$ ) were statistically significant.

### Conclusion

Emotional intelligence was high and does not vary with different sociodemographic characteristics among nursing students.

## KEYWORDS

Emotional Intelligence, Nepal, nursing students



## INTRODUCTION

The nursing profession is a noble profession, where nurses face various emotional turmoil. Managing own emotion and interpreting other's emotion is the most essential prerequisite in this profession. This requires not only critical thinking but also needs integrated emotional intelligence during nursing practice. According to Peter Salovey and John Mayer, "Emotional Intelligence involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions".<sup>1</sup> Emotional Intelligence (EI) is also considered as an important factor contributing to academic success.<sup>2</sup> An emotionally intelligent nurse can work in harmony with his/her thoughts and feelings.<sup>3</sup> Studies have shown that EI allows nurses to develop therapeutic relationships to meet patients' and their family's need and work-related conflict-handling styles to better manage stress.<sup>4-7</sup> Research study shows that nurses' EI has a direct impact on the hospital services quality.<sup>8</sup> In the nursing profession, EI has been associated with good job performance with retention of nurses and positive patient outcomes,<sup>9</sup> successful managerial styles,<sup>10</sup> and effective teamwork.<sup>11</sup> Very little research related to EI has been conducted in Nepal. Identification of EI skills among nursing students will help in the effective transition from the academic setting to a professional setting.<sup>12</sup> Assessing the EI among nursing students will help to identify the need for the training program and will be a reference to incorporate content of EI in the nursing curriculum. This study will also help to sensitize the participants and authorities to focus on its importance. The present study aims to find out the emotional and its association with selected demographic variables among undergraduate nursing students of selected colleges of Morang district, Nepal.

## METHODOLOGY

The cross-sectional study was undertaken from June 2020 to November 2020 among 423 nursing students enrolled in the BSc Nursing (Bachelor of Science in Nursing) and PBNS (Post Basic Bachelor of Nursing Science) program among three colleges of Morang district. Out of total four colleges of Purbanchal University in Morang district, the three colleges were selected randomly, where Purbanchal University School of Health Sciences (PUSHS) is the constituent college and the Hamro School of Nursing and Koshi Health and Science Campus are the affiliated colleges of Purbanchal University. Ethical clearance of the study was obtained from PUSHS-Institutional Review Committee (Ref no IRC/008/2020). As census sampling technique was used in the study, all the nursing students were selected for the study. The total sample size was (241+103+79)=423 from PUSHS, Hamro School of Nursing and Koshi Health and Science Campus respectively. Those nursing students who were not willing to participate and did not provide consent were excluded from the study. Four hundred and twenty-three nursing students participated among 492 students. Thus, the response rate was 85.97%. The confidentiality of the students was maintained. A standard tool, "The Schutte Self

Report Emotional Intelligence Test (SSEIT)" was used to collect the data. It is a valid tool with internal consistency (Cronbach's alpha=0.90) and acceptable test-retest reliability (0.78).<sup>13</sup> SSEIT is composed of 33 items and is a five-point Likert scale where 1= strongly disagree, 2= disagree, 3=neither disagree nor agree, 4= agree, 5= strongly agree. All the items were positively scored except for items 5, 28, and 33. The score ranges from 33 to 165. The 33-item was articulated in four subscales: perception of emotions= 10 items; managing own emotions= 9 items; managing other's emotions= 8 items; and utilization of emotions= 6 items. The level of EI was categorized as follows: Low EI score  $\leq 77$ , Moderate EI scores 78-121, High EI scores  $\geq 122$ . Data was collected using a self-administered questionnaire which was created in the google form. The students in each academic year were called separately at the online meeting and were given orientation about the tool. Data were analyzed using SPSS version 18. The Chi-square test was used to find the association of EI/ EI domains with socio-demographic variables. The p value 0.05 or less was considered as significant.

## RESULTS

The findings show that more than half (59.3%) of the students were of age group 21-25 years. Sixty-one percent of the students were from the BSc Nursing program and 39% of students were from the PBNS (Post-Basic Bachelor of Nursing Science) program. Among them, 77.1% belonged to the single-family, 84.6% were unmarried, 87% did their schooling from a private school. Most of the student's parents (38.8% mother, 33.6% father) had secondary level education. The majority (77.3%) of the student's mother was homemakers, whereas the majority (36.9%) of the student's father was a businessman

**Table 1:** Baseline information of study participants (n=423)

Characteristics	Categories	n(%)
Age (in years)	$\leq 20$	126 (29.8)
	21-25	251(59.3)
	26-30	41(9.7)
	>30	5 (1.2)
Mean $\pm$ SD	22.2 $\pm$ 2.8	
Program	BSc Nursing	258 (61.0)
	PBNS	165(39.0)
Type of family	Joint family	97 (22.9)
	Single-family	326(77.1)
Marital Status	Married	65 (15.4)
	Unmarried	358 (84.6)
Schooling	Government school	55 (13.0)
	Private school	368 (87.0)
Mother's Education	Up to Primary	103(24.3)
	Lower Secondary (class 6 to 8)	25 (5.9)
	Secondary (Class 9 &10)	164 (38.8)
	Higher Secondary (Class 11 & 12)	96 (22.7)
	Up to Bachelor	30 (7.1)
	Masters and above	5 (1.2)



Characteristics	Categories	n(%)
Father's Education	Up to Primary	35 (8.3)
	Lower Secondary (class 6 to 8)	10 (2.4)
	Secondary (Class 9 &10)	142 (33.6)
	Higher Secondary (Class 11 & 12)	125 (29.6)
	Bachelor	82(19.4)
	Masters and above	29 (6.9)
Occupation of Mother	Homemaker	327 (77.3)
	Service	41 (9.7)
	Business	36 (8.5)
	Agriculture	10 (2.4)
	Other	9 (2.1)
Occupation of Father	Business	156 (36.9)
	Service	116(27.4)
	Agriculture	69 (16.3)
	Police/Army	22(5.2)
	Retired	12(2.8)
	Abroad Employee	16(3.8)
	Expired	3(7)
	Other	29(6.9)

Figure 1 depicts that 26.70% of the students were from BSc Nursing first year Among PBNS students, 39.40% of the students were from the third year.

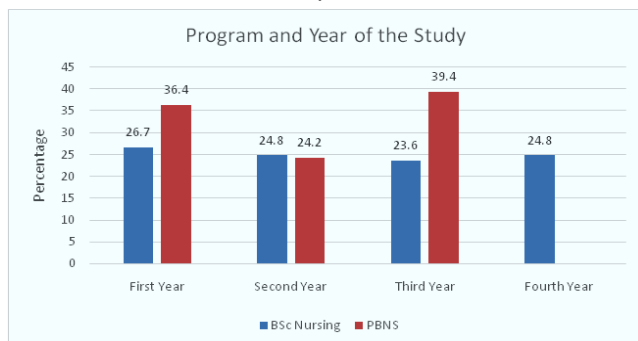


Figure 1: Year-wise distribution of study participants (n=423)

Table 2 depicts that 3/4<sup>th</sup> (75.4%) of nursing students (BSN and PBNS) had a total High level of EI score. Three-fourth (75.6%) of BSN and 75.2% of PBNS students scored a high level of EI.

Level of EI	BSN n (%)	PBNS n (%)	Total n (%)
Moderate (78-121)	63 (24.4%)	41 (24.8%)	104 (24.6)
High (≥122)	195 (75.6%)	124 (75.2%)	319 (75.4)

Table 3 depicts that the Mean ± SD of the overall score of EI is 128.87 ± 10.38. Mean ± SD of the domains of EI are 35.64±4.32, 36.90±3.34, 31.61±2.97, 24.72±2.70 for Perception of emotions, Management of own emotions, Management of others' emotions, and Utilization of emotions respectively.

Management of others' emotions, and Utilization of emotions respectively.

Types of domain	Mean ± SD
Perception of emotions	35.64±4.32
Management of own emotions	36.90±3.34
Management of others' emotions	31.61±2.97
Utilization of emotions	24.72±2.70
<b>Total</b>	<b>128.87 ± 10.38</b>

Table 4 shows that there was no significant association between the total score of EI with selected demographic variables like age, program, year of the study, type of family, marital status, schooling, parent's education, parent's occupation.

Variables	Categories	Level of EI n (%)		P-Value
		Moderate	High	
Age in years	≤22 (median)	66 (26.2)	186 (73.8)	0.350
	>22	38 (22.2)	133 (77.8)	
Program	BScN	63 (24.4)	195 (75.6)	0.920
	PBNS	41 (24.8)	124 (75.2)	
Year of the Study	First-year	33 (25.6)	96 (74.4)	0.753
	Other years	71 (24.1)	223 (75.9)	
Type of family	Joint family	29 (29.9)	68 (70.1)	0.166
	Single-family	75 (23.0)	251 (77.0)	
Marital Status	Married	12 (18.5)	53 (81.5)	0.213
	Unmarried	92 (25.7)	266 (74.3)	
Schooling	Government school	12 (21.8)	43 (78.2)	0.609
	Private school	92 (25.0)	276 (75.0)	
Mother's Education	Up to Higher Secondary	70 (24.0)	222 (76.0)	0.662
	Bachelor and above	34 (26.0)	97 (74.0)	
Father's Education	Up to Higher Secondary	75 (24.0)	237 (76.0)	0.661
	Bachelor and above	29 (26.1)	82 (73.9)	
Mother's Occupation	Home Maker	85 (26.0)	242 (74.0)	0.215
	Others	19 (19.8)	77 (80.2)	
Father's Occupation	Business	42 (26.9)	114 (73.1)	0.394
	Others	62 (23.2)	205 (76.8)	

Findings in Table 5 depict that the Present study showed that there was a significant association of EI domain: perception of emotion with an academic year of the study (p=0.020) and occupation of the mother (p=0.017). The study also revealed that management of other's emotions was significantly associated with the year of the study (p=0.018) and utilization of the emotion was associated with the type of schooling (p=0.003).



**Table 5: Association of EI Domains with Selected Demographic Variables (n=423)**

Variables	Categories	Perception of emotions n (%)		Management of own emotions n(%)	
		Moderate	High	Moderate	High
Age in years	≤22	151 (59.9)	101 (40.1)	19 (7.5)	233 (92.5)
	>22	92 (53.8)	79 (46.2)	11 (6.4)	160 (93.6)
<b>P-Value</b>		0.212		0.663	
Program	BSc Nursing	149 (57.8)	109 (42.2)	16 (6.2)	242 (93.8)
	PBNS	94 (57)	71 (43.0)	14 (8.5)	151(91.5)
<b>P-Value</b>		0.874		0.372	
Year of the Study	First year	85 (65.9)	44(34.1)	10 (7.8)	119 (92.2)
	Other years	158 (53.7)	136(46.3)	20 (6.8)	274 (93.2)
<b>P-Value</b>		0.020*		0.726	
Type of family	Joint	55 (57.7)	41 (42.3)	9 (9.3)	88 (90.7)
	Single	187 (57.4)	139 (42.6)	21 (6.4)	305 (93.6)
<b>P-Value</b>		0.984		0.339	
Marital Status	Married	35 (53.8)	30 (46.2)	5 (7.7)	60 (92.3)
	Unmarried	208 (58.1)	150 (41.9)	25 (7.0)	333 (93.0)
<b>P-Value</b>		0.523		0.795 #	
Studied in	Government school	26 (47.3)	29 (52.7)	4 (7.3)	51(92.7)
	Private school	217 (59.0)	151 (41.0)	26 (7.1)	342 (92.9)
<b>P-Value</b>		0.102		1.000 #	
Mother's Education	Up to Higher Secondary	164 (56.2)	128 (43.8)	21 (7.2)	271 (92.8)
	Bachelor and above	79 (60.3)	52 (39.7)	9 (6.9)	122 (93.1)
<b>P-Value</b>		0.426		0.905	
Father's Education	Up to Higher Secondary	176 (56.4)	136 (43.6)	21 (6.7)	291 (93.3)
	Bachelor and above	67 (60.4)	44 (39.6)	9 (8.1)	102 (91.9)
<b>P-Value</b>		0.470		0.627	
Mother's Occupation	Home Maker	198(60.6)	129(39.4)	26 (8.0)	301 (92.0)
	Others	45 (46.9)	51(53.1)	4 (4.2)	92 (95.8)

## DISCUSSION

The present study findings show that 75.4% of nursing students had a total high level of Emotional Intelligence score. The study was similar to the findings of a study conducted among Saudi nursing students<sup>14</sup> as none of the nursing students had a low level of emotional intelligence. Other studies done in Nigeria by Omoronyia FRet al<sup>15</sup> was also consistent with the findings of the present study. Intermediate level of EI was found in the majority of the samples in a study done by Sinha Bet al<sup>16</sup> in Nepal, HassaliM et al<sup>17</sup> in Malaysia, Kaya H<sup>18</sup> in Turkey, Mahmoud HM<sup>19</sup> et al in Egypt, Codier E et al<sup>2</sup> in the United States.

Present study findings show comparatively higher EI than the studies conducted among nursing students of Riyadh and Tanta by Moawed S et al.<sup>2</sup> The dissimilarities in the findings may be related to the age differences between the studies. The mean age of the students in the present study being higher than the compared study group.

The present study also showed contradictory findings on a study conducted by Faye A et al<sup>20</sup> in India where 70% of the post-graduate medical students had low EI scores. The differences in the findings might be because of the increased workload of the postgraduate medical students.

The mean ± SD of the overall score of EI is 128.87 ± 10.38. Mean ± SD of the domains of EI are 35.64±4.32, 36.90±3.34, 31.61±2.97, 24.72±2.70 for Perception of emotions, Management of own emotions, Management of others'

emotions, and Utilization of emotions respectively. The finding of the study is in line with the study conducted by Ravikumar R et al<sup>21</sup> among post-graduate medical students in New Delhi, India.

The present study shows that there was no significant association ( $p > 0.05$ ) between the EI score with the selected demographic variables which was similar to the findings of a study among Turkish clinical nurses conducted by Kahraman N et al.<sup>22</sup> A study done in Nepal by Sinha B et al<sup>16</sup> is also consistent with the findings in which no significant association was found with age, type of family, parent's educational status, and program. Another study conducted in Government college of Eastern Nepal is consistent with the findings of present study.<sup>23</sup> A similar finding was present in the longitudinal study done by Kaya et al<sup>18</sup> in Turkey and Mahmoud HM et al<sup>19</sup> in Egypt where no significant differences in EI score with the academic year/ semester.

In contrary to the present finding, a study done by Faye et al<sup>20</sup> and Azimi S et al<sup>24</sup> in India found that EI increases among married students. The differences in findings may be because both males and females are included in the later studies.

The present study showed that there was a significant association of EI domain: perception of emotion with an academic year of the study and occupation of the mother. The study also revealed that management of other's emotions was significantly associated with the year of the study and utilization of the emotion was associated with the type of schooling. Findings were similar to the study done by postgraduate medical students in New Delhi, where students who studied in a government school was a more emotionally intelligent and academic year has significant differences in sub-dimensions of EI ( $p=0.018$ ).<sup>21</sup> The differences in EI domains in the academic year might be because students in other academic years might get emotional maturity because of more exposure to clinical and community setting in comparison to first-year students.

## CONCLUSION

Emotional intelligence was high and does not vary with different socio demographic characteristics among nursing students.

## RECOMMENDATION

We recommend consideration of all socio demographic characteristics for good emotional intelligence of nursing students. We can suggest a phenomenological study for a depth understanding of emotional intelligence.

## LIMITATION OF THE STUDY

We were not able to confirm ruling out social desirability bias among study participants.



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## CONFLICT OF INTEREST

We declare no conflict of interest.

## REFERENCES

- Salovey P, Mayer JD. Emotional Intelligence. *Imagination, Cognition and Personality*. 1990;9(3):185-211. DOI:10.2190/DUGG-P24E-52WK-6CDG
- Codier E, Odell E. Measured emotional intelligence ability and grade point average in nursing students. *Nurse Educ Today*. 2014;34(4):608-12. DOI:10.1016/j.nedt.2013.06.007
- Freshwater D, Stickley T. The heart of the art: emotional intelligence in nurse education. *Nursing inquiry*. 2004;11(2):91-8. DOI:10.1111/j.1440-1800.2004.00198.x
- Cadman C, Brewer J. Emotional intelligence: a vital prerequisite for recruitment in nursing. *Journal of nursing management*. 2001;9(6):321-4. DOI:10.1046/j.0966-0429.2001.00261.x
- Sim S, Bang M. Emotional Intelligence, Stress Coping, and Adjustment to College Life in Nursing Students. *International Journal of Bio-Science and Bio-Technology*. 2016;8:21-32. DOI: 10.14257/ijbsbt.2016.8.3.03
- Gerits L, Derksen JJ, Verbruggen AB. Emotional intelligence and adaptive success of nurses caring for people with mental retardation and severe behavior problems. *Mental retardation*. 2004;42(2):106-21. DOI: 10.1352/0047-6765(2004)42<106:eiaaso>2.0.co;2
- Morrison J. The relationship between emotional intelligence competencies and preferred conflict-handling styles. *Journal of nursing management*. 2008;16(8):974-83. DOI:10.1111/j.1365-2834.2008.00876.x
- RanjbarEzzatabadi M, Bahrami MA, Hadizadeh F, Arab M, Nasiri S, Amiresmaili M, et al. Nurses' emotional intelligence impact on the quality of hospital services. *Iranian Red Crescent medical journal*. 2012;14(12):758-63. DOI: 10.5812/ircmj.926
- Kooker BM, Shoultz J, Codier EE. Identifying emotional intelligence in professional nursing practice. *Journal of professional nursing: official journal of the American Association of Colleges of Nursing*. 2007;23(1):30-6. DOI: 10.1016/j.profnurs.2006.12.004
- Horton-Deutsch S, Sherwood G. Reflection: an educational strategy to develop emotionally competent nurse leaders. *Journal of nursing management*. 2008;16(8):946-54. DOI:10.1111/j.1365-2834.2008.00957.x
- McCallin A, Bamford A. Interdisciplinary teamwork: is the influence of emotional intelligence fully appreciated? *Journal of nursing management*. 2007;15(4):386-91. DOI:10.1111/j.1365-2834.2007.00711.x
- Kramer M, Halfer D, Maguire P, Schmalenberg C. Impact of healthy work environments and multistage nurse residency programs on retention of newly licensed RNs. *The Journal of nursing administration*. 2012;42(3):148-59. DOI:10.1097/NNA.0b013e31824808e3
- Schutte NS, Malouff JM, Hall LE, Haggerty DJ, Cooper JT, Golden CJ, et al. Development and validation of a measure of emotional intelligence. *Personality and Individual Differences*. 1998;25(2):167-77. DOI:10.1016/S0191-8869(98)00001-4
- EbtsamAlyAbouHashish EFB. Emotional Intelligence among Saudi Nursing Students and Its Relationship to Their Critical Thinking Disposition at College of Nursing- Jeddah, Saudi Arabia. *American Journal of Nursing Research*. 2018;6(6):350-8. DOI:10.12691/ajnr-6-6-2
- Faith R. Omoronyia LEOEIO. Psychiatric Nurses' Level of Emotional Intelligence in a Developing Country: A Survey in Neuropsychiatric Hospitals in The Niger-Delta Region, Nigeria. *EAS Journal of Nursing and Midwifery*. 2020;2(3):9. DOI:10.36349/EASJNM.2020.v02i03.001
- Sinha B, Bajracharya R, Pandey S, KC S, Koirala S, Kushwaha MP. Emotional Intelligence among undergraduate nursing students. *International Journal of Scientific and Research Publications*. 2017;7(12):622-9. DOI:10.13140/RG.2.2.14224.92165
- Hassali M, Hussain R, Saleem F, Iqbal Q, Mohammad A, Ahmad A, et al. Perceived Emotional Intelligence and Its Association with the Demographic Characteristics among Pharmacy Students: A Cross-Sectional Study. *Journal of Pharmacy Practice and Community Medicine*. 2017;2017:108-13. DOI:10.5530/jppcm.2017.3.25
- Kaya H, Şenyuva E, Bodur G. Developing critical thinking disposition and emotional intelligence of nursing students: longitudinal research. *Nurse Education Today*. 2017;48:72-7. DOI:10.1016/j.nedt.2016.09.011
- Hayam Mansour Mahmoud SMAE-D, MarwaAbd El-Gawad Ahmed Mousa. Emotional Intelligence among Baccalaureate Students at the Faculty of Nursing, Alexandria University, Egypt: A Cross-sectional Study. *Journal of Education and Practice*. 2013;4(7):49-61. Corpus ID: 56159828
- Faye A, Kalra G, Swamy R, Shukla A, Subramanyam A, Kamath R. Study of emotional intelligence and empathy in medical postgraduates. *Indian journal of psychiatry*. 2011;53:140-4. DOI: 10.4103/0019-5545.82541
- Ravikumar R, Rajoura OP, Sharma R, Bhatia MS. A Study of Emotional Intelligence Among Postgraduate Medical Students in Delhi. *Cureus*. 2017;9(1):e989-e. DOI:10.7759/cureus.989
- NilgunKahraman DH. Identifying emotional intelligence skills of Turkish clinical nurses according to sociodemographic and professional variables. *Journal of Clinical Nursing*. 2016(25):1006-15. DOI:10.1111/jocn.13122
- Shrestha M, Mandal PK. Emotional intelligence among nursing students of a government campus in eastern Nepal. *Journal of Kathmandu Medical College*. 2021;10(1):39-42.
- Azimi S, Farid AAA, Fard MJK, Khoei N. Emotional intelligence of dental students and patient satisfaction. *European Journal of Dental Education*. 2010;14(3):129-32. DOI:10.1111/j.1600-0579.2009.00596.x

