

Emotional Intelligence and Academic Performance Among Bachelor Level Nursing Students at a Campus in Kathmandu

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Abstract

Educational institutions are increasingly recognizing the importance of fostering Emotional Intelligence (EI) alongside academic skills. Many studies have showed that high emotional intelligence correlates with better interpersonal relationships, job satisfaction, leadership qualities, and academic accomplishment. Students face various difficulties in controlling emotions, which impact their learning skills and academic performance. The objective of this study was to find out the level of emotional intelligence and academic performance among bachelor level students. A descriptive cross-sectional design was carried out in nursing campus of Kathmandu. Total enumerative sampling technique was used for data collection. Total sample was 119. Self-administered questionnaire was used for data collection after ethical approval from Institute Review Board of Institute of Medicine was obtained. Data analysis was done with the use of descriptive and inferential statistics. The study findings revealed that 76.5 percent, 18.5 percent and 5.0 percent of the students had average, high and low level of emotional intelligence (EI) respectively. Self-reported academic performance showed that 51.3 percent, 46.2 percent and 2.5 percent of the students were excellent, good and moderate respectively. There was no statistically significant association between emotional intelligence and socio-demographic variables of the respondents ($p>0.05$). There was a moderate positive correlation ($r=0.583$) between emotional intelligence and academic performance at the 0.01 level of the significant. The study concluded that most of the students had average level of Emotional Intelligence. Likewise, half of the students had excellent academic performance. Thus, students with high EI tend to have better learning and higher academic achievement. By fostering emotional intelligence, educational institutions can enhance students' overall academic success and prepare them for future challenges.

Keywords: academic performance, bachelor level students, emotional intelligence, educational institution, nursing campus.

Emotional Intelligence (EI) is a crucial factor in both personal and professional success which encompasses self-awareness, self-regulation, motivation, empathy, and social skills. Self-awareness is the ability to understand one's own emotions and its effects on their performance whereas self-regulation allows individuals to manage their responses to emotions when dealing with strong emotions. Meanwhile motivation, another key component of Emotional Intelligence, refers to the dynamism of behavior and how an individual's actions are initiated, sustained, directed, and terminated (Monish et al. 2023). Goleman described Emotional Intelligence (EI) as the ability to recognize our own feelings and those of others, to motivate ourselves, and to manage emotions well, both within ourselves and in our relationships (Kumar, 2021).

Emotional Intelligence is a key indicator of abilities such as self-awareness, self-control, motivation, empathy, and social skills. Practicing to develop and apply such emotional intelligence enables individuals to make informed decisions, resolve challenges effectively, and inspire both themselves as well as others. Consequently, by doing so, it becomes possible to achieve success in every area that contributes to academic achievement. Academic pressure refers to the mental distress arising due to the anticipated frustration associated with academic failure or even the awareness of its possibility (Simihag, 2019). Students often experience academic pressure in various forms such as school examinations, demonstrating progress in subjects, participating in classroom discussions, excelling in tuition classes, competing with peers, and living up to the academic expectations of parents and teachers. Thus, students are susceptible to facing stress while trying to manage such demands for academic success (Sethi, 2023).

A cross-sectional study conducted in Nepal revealed that the majority (75.4 percent) of nursing students had a high level of Emotional Intelligence (EI), while 24.6 percent had a moderate level. The study also found no statically significant association of the total EI score with any of the selected socio-demographic variables (Pradhan et al., 2021).

A study conducted in Kerala, India, found that the majority (63.3 percent) of nursing students had good academic performance, while 29.3 percent had average and 5.7 percent had very good academic performance. The study also revealed a positive correlation between emotional intelligence and academic performance among nursing students ($p < 0.01$), indicating that higher emotional intelligence is associated with better academic outcomes (Manjusha, 2017). A cross-sectional study conducted in Pokhara, Nepal found a positive relationship between emotional intelligence and academic achievement ($r=0.236$). It concludes that fostering emotional intelligence in students can significantly enhance their academic achievement. Moreover, female students are more capable of managing their emotions and coping up with academic stress (Shrestha et al. 2021).

To assess the level of emotional intelligence and academic performance among bachelor level students at Nursing Campus in Kathmandu.

The study on emotional intelligence could be highly beneficial in nursing education due to its association with positive outcomes for nursing students. Higher emotional

intelligence is linked to improved well-being, effective stress management, enhanced academic and practical performance, and stronger nursing leadership. Additionally, it may have significant implications for nursing practice by improving the understanding of patients' emotional responses and enhancing the overall quality of nursing care. Furthermore, the study could serve as a valuable resource for curriculum developers seeking to integrate emotional intelligence into educational programs and provide a robust foundation for future researchers in this field.

Methodology

This descriptive cross-sectional study was conducted at Maharajgunj Nursing Campus, TU, IOM, Kathmandu among BSc Nursing Students (second year, old second year, and fourth year), using a self-administered questionnaire to collect data. A semi structure and structure schedule was used consisting of three parts (Part I- the socio-demographic information) Part II: Emotional Quotient Self-Assessment Checklist (EQSAC) Emotional Quotient Self-Assessment Checklist Part III: Academic Performance Scale Questionnaire. Participation was voluntary, and ethical approval was obtained from the Institutional Review Committee of Institute of Medicine {Ref. No. 59(6-11) E₂/0}, with formal permission granted by Maharajgunj Nursing Campus. The collected data were analyzed using the Statistical Package for the Social Science (SPSS 20). Descriptive statistics (frequency, percentage, mean, and standard deviation) and inferential statistics (chi-square test and Fisher's exact test) were applied to assess the association between the levels of emotional intelligence and selected socio-demographic variables, as well as its relationship with academic performance.

Results

Table 1
Socio-demographic Characteristics of the Respondents

		n=119
Variables	Number	Percent
Age (In completed year)		
≤ 20	25	21
> 20	94	79
Mean age ± SD = 21.50±1.45 (Range=18-29)		
Sex		
Female	113	95.0
Male	6	5.0
Ethnicity		
Brahmin	76	63.9
Janajati	24	20.2
Madhesi	12	10.1
Dalit	5	4.2

Muslim	1	0.8
Thakuri	1	0.8
Birth order		
First	47	39.5
Second	43	36.1
Third+	29	24.4
Siblings		
Yes	116	97.5
No	3	2.5

+fourth/ fifth

Table 1 indicates that more than half (54.6 percent) of the students were aged 20 years or younger, with a mean age \pm SD of 21.50 \pm 1.45 years. The majority (95 percent) of the participants were female. In terms of ethnicity, 63.9 percent of the respondents were Brahmin/Chhetri. Additionally, 39.5 percent were first-born children, and nearly all (97.5 percent) of respondents had siblings.

Table 2
Educational and Occupational Status of the Respondents' Parents

Variables	Number	n=119 Percent
Education of Father		
Can read and write	116	97.5
Cannot read and write	3	2.5
If can read and write, n=116		
Primary	8	6.9
Secondary	31	26.7
Higher secondary	26	22.4
Bachelor	33	28.4
Master and above	18	15.5
Education of mother		
Can read and write	109	91.6
Cannot read and write	10	8.4
If can read and write, n=109		
Primary	21	19.3
Secondary	38	34.9
Higher secondary	28	25.7
Bachelor	11	10.1
Master	11	10.1
Occupation of father (n=118)		
Employed	116	98.3

Unemployed	2	1.6
If employed, n=116		
Service	62	53.4
Business	37	31.8
Agriculture	12	10.3
Foreign employment	5	4.3
Occupation of mother		
Home maker	82	68.9
Service	18	15.1
Business	12	10.1
Agriculture	6	5.0
Foreign employment	1	0.8

Table 2 shows that 27.7 percent of the respondents' fathers had completed a bachelor's degree, while 31.9 percent of their mothers had attained a secondary level of education. Regarding occupation, 40.3 percent of the respondents' fathers were employed in the service sector, whereas the majority (68.9 percent) of their mothers was homemakers. Additionally, one respondent's father was deceased.

Table 3
Emotional Intelligence Score of Respondents

Domains	n=119					
	Possible Score		Obtained Score		Median (Q1,Q3)	Range
	Min.	Max.	Min.	Max.		
Self-awareness	5	25	12	25	20 (18,21)	13
Self-confidence	5	25	11	23	18 (17,20)	12
Empathy	5	25	11	25	18 (17,20)	13
Motivation	5	25	8	23	19 (16,20)	14
Self-control	5	25	10	23	18 (17,20)	15
Social competency	5	25	8	24	17 (15,19)	16

Table 2 presents the possible and obtained scores of emotional intelligence among respondents, with the highest score of 25 recorded in self-awareness domain and the lowest score of 8 in the motivation and social competency domains.

Table 3
Level of Emotional Intelligence of Respondents

						n=119
Level	Frequency	Percent	Min. Score	Max. Score	Median (Q1,Q3)	Range
Low	6	5.0	70	139	109 (102,117)	69
Average	91	76.5				
High	22	18.5				

Table 3 illustrates the respondents' levels of emotional intelligence, showing that the majority (76.5 percent) had an average level of emotional intelligence. The minimum and maximum scores were 70 and 139 respectively.

Table 4
Emotional Intelligence of Respondents in each Domain

				n=119
Domains	Emotional Intelligence			
	Low (<15) No. (percent)	Average (≥15 & <20) No. (percent)	High (≥20) No. (percent)	
Self-awareness	5 (4.2)	48 (40.3)	66 (55.3)	
Self-confidence	4 (3.4)	82 (68.9)	33 (27.7)	
Self-control	13 (10.9)	75 (63.0)	31 (26.1)	
Empathy	14 (11.8)	63 (52.9)	42 (35.3)	
Motivation	8 (6.7)	79 (66.4)	32 (26.9)	
Social competency	28 (23.5)	69 (58.0)	22 (18.5)	

Table 4 presents the respondents' level of emotional intelligence across different domains. More than half (55.3 percent) exhibited a high level of emotional intelligence in self-awareness. Additionally, 68.9 percent had an average level in self-confidence, followed by 66.4 percent in motivation, 63.0 percent in self-control, 58.0 percent in social competency, and 52.9 percent in empathy.

Table 5
Level of Academic Performance of Respondents

						n=119
Level	Frequency	Percent	Min. Score	Max. Score	Median (Q1,Q3)	Range
Excellent (33 - 40)	61	51.3	20	40	33 (29,35)	20
Good (25 - 32)	55	46.2				
Moderate (17 - 24)	3	2.5				

Table 5 presents the academic performance levels of respondents, showing more than half (51.3 percent) achieved excellence in academic performance. The minimum and maximum scores were 20 and 40 respectively.

Table 6
Association between Emotional Intelligence and Socio-demographic Variables

				n=119
Variables	Emotional Intelligence		χ^2 value	P value
	Low to average (percent)	High (percent)		
Age (In completed year)				
≤ 20	21 (84.0)	4 (16.0)		0.486**
>20	76 (80.9)	18 (19.1)		
Sex				
Male	3 (50.0)	3 (50.0)		0.076**
Female	94 (83.2)	19 (16.8)		
Ethnicity				
Brahmin/Chhetri	62 (81.6)	14 (18.4)	.001	0.980
Others*	35 (81.4)	8 (18.6)		
Birth order				
First	40(85.1)	7 (14.9)	4.019	0.134
Second	37 (86.0)	6 (14)		
Third+	20 (69.0)	9 (31.0)		
Siblings				
Yes	95 (81.9)	21 (18.1)		0.462**
No	2 (66.7)	1 (33.3)		

+fourth/ fifth

*Dalit, Janjati, Madhesi, Muslim & Thakuri

**Fisher exact test

Table 6 shows the association between emotional intelligence and socio-demographic variables, analyzed using Pearson chi-square and Fisher's exact tests. The results indicate that there was no statistically significant association between the level of

emotional intelligence and any socio-demographic variables at the 95 percent confidence interval.

Table 7
Association between Emotional Intelligence and Parents' Educational and Occupational Status

			n=119	
Variables	Emotional Intelligence		χ ² value	P value
	Low to average (percent)	High (percent)		
Education of father				
Can read and write	96 (82.8 percent)	20 (17.2 percent)	0.087**	
Can't read and write	1 (33.3 percent)	2 (66.7 percent)		
Education of mother				
Can read and write	88 (80.7 percent)	21 (19.3 percent)	0.686**	
Can't read and write	9 (90.0 percent)	1 (10.0 percent)		
Occupation of father (n=118)				
Service	53 (85.5 percent)	9 (14.5 percent)	1.650	0.436
Business	29 (78.4 percent)	8 (21.6 percent)		
Others*	14 (73.7 percent)	5 (26.3 percent)		
Occupation of mother				
Home maker	69 (84.1 percent)	13 (13.9 percent)	1.214	0.271
Others#	28 (75.7 percent)	9 (24.3 percent)		

*Agriculture, foreign employment, unemployed service, business [#]Agriculture, foreign employment, service, business
**Fisher exact test

Table 7 shows the association between emotional intelligence and parent's educational and occupational status, analyzed using Pearson chi-square and Fisher's exact tests. The results indicate that there was no statistically significant association between the level of emotional intelligence and parents' education and occupation at 95 percent confidence interval.

Table 8
Association between Emotional Intelligence and Academic Characteristics

				n=119
Variables	Emotional Intelligence		χ^2 value	P value
	Low to average (percent)	High (percent)		
Academic year				
Second year	30 (76.9)	9 (23.1)	5.264	0.072
Old second year	38 (92.7)	3 (7.3)		
Fourth year	29 (74.4)	10 (25.6)		
Previous academic achievement in percentage				
≤70	30 (81.1)	7 (18.9)	3.134	0.209
71-79	51 (86.4)	8 (13.6)		
≥80	16 (69.6)	7 (30.4)		

Table 8 shows the association between emotional intelligence and academic characteristics, analyzed using the chi-square test. The results indicate that there was no statistically significant association between the level of emotional intelligence and any academic variables at the 95 percent confidence interval.

Table 9
Relationship between Emotional Intelligence and Academic Performance

Variables	Correlation Value	P value
Emotional Intelligence	-	<0.001
Academic Performance	.583**	-

** Correlation is significant at the 0.01 level (2 tailed). Pearson correlation(r)

Table 9 displays a moderate positive correlation ($r=0.583$) between emotional intelligence and academic performance of the respondents, which is statistically significant at the 0.01 level.

Discussion

The study was conducted among 119 respondents, with 79 percent of them aged above 20 years. The majority (63.9 percent) of the respondents were from the Brahmin/Chhetri community. It was found that 97.5 percent of the respondents' fathers and 91.6 percent of their mothers were literate. Additionally, 53.4 percent of the respondents' fathers were employed in service sector, while the majority (68.9 percent) of their mothers was homemakers.

The findings revealed that most (76.5 percent) of the respondents had an average level of emotional intelligence, followed by 18.5 percent with high and 5.0 percent with low levels of emotional intelligence. The minimum and maximum scores were 70 and 139 respectively. A similar study conducted among 130 nursing students in Gujarat, India, showed that 72.6 percent had average, 13.9 percent had good, and 13.4 percent had poor emotional intelligence (Joshi et al., 2020). These findings in India contradict with the current study, where more than half (52 percent) of the students had high emotional intelligence, 31 percent had average, 10 percent had extremely high, and 7 percent had low emotional intelligence (Malathy, 2023).

The study on academic performance found that half (51.3 percent) of the students had excellent academic performance, 46.2 percent had good performance, and 2.5 percent had moderate academic performance. A similar study conducted among nursing students in Saudi Arabia reported satisfactory academic performance, with a mean score of 2.25 (Llego, 2021).

The study also found no significant association between the level of emotional intelligence and socio-demographic variables ($p > 0.05$). This finding aligns with a similar study conducted in Nepal, where the findings revealed no association between students' emotional intelligence levels and demographic variables such as age, ethnicity, or academic level (Shrestha & Mandal, 2021).

The results of this study are inconsistent with those of a study conducted in Saudi Arabia. The current study found a significant association between the students' emotional intelligence (EI) level and several variables including age ($p = 0.037$), gender ($p = 0.018$), year of study ($p < 0.001$), GPA ($p = 0.031$), and mother's education ($p < 0.001$) (Almansour, 2023). The findings of the current study contrast with the Saudi Arabian study, due to differences in research settings, sample size, age, gender, and ethnicity.

The study findings also revealed a moderate positive correlation ($r = 0.583$) between emotional intelligence and academic performance of the respondents ($p = 0.01$). These findings are consistent with a study conducted in Pakistan, which found a strong positive relationship ($r = 0.880$) between emotional intelligence and academic performance of the respondents (Suleman, 2019). Additionally, the findings of the study align with a study in Saudi Arabia that showed a positive association between emotional intelligence and better academic achievement (Almegeuly, 2022).

Conclusion

It is concluded that most students have an average level of emotional intelligence, while half of the students displayed excellent academic performance. The study found no significant association between emotional intelligence level and socio-demographic variables. However, a moderate positive correlation was observed between emotional intelligence and academic performance of the students. This study highlights the benefits of emotional intelligence in nursing education, as higher emotional intelligence is linked to

improved personal well-being, effective stress management, enhanced academic and practical performance, and stronger nursing leadership.

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