

**A CROSS-SECTIONAL STUDY ON ASSOCIATION BETWEEN EMOTIONAL INTELLIGENCE AND ACADEMIC PERFORMANCE AMONG NURSING STUDENTS OF SELECTED NURSING COLLEGES IN KATHMANDU**

**Nabina Paneru<sup>1\*</sup> and Ashish Kafle<sup>2</sup>**

<sup>1</sup>Tribhuvan University, Padma Kanya Multiple Campus, Department of Psychology, Bagbazar, Kathmandu

<sup>2</sup>Tribhuvan University, Padma Kanya Multiple Campus, Department of Psychology, Bagbazar, Kathmandu

<https://doi.org/10.54922/IJEHSS.2024.0653>

**ABSTRACT**

**Background:** Emotional intelligence incorporates the important aspects of interpersonal and intrapersonal relationships, adaptability, moods and stress management skills, which have a profound effect on the academic performance of students.

**Methodology:** An Analytical Cross-sectional study was carried out with main objective to find out the association between emotional intelligence and academic performance of nursing students from selected nursing colleges. Using non - probability purposive sampling method, PCL Nursing 3rd year students were selected and data was collected using standardized Assessing Emotions Scale to measure Emotional Intelligence and final examination score of the students was considered as academic performance. Collected data was processed and analyzed using SPSS version 24.

**Results:** The findings revealed that majority of the nursing students have high emotional intelligence. There is no any statistically significant correlation between emotional intelligence and academic performance of nursing students. Regarding sub dimensions of Emotional Intelligence, there was no any statistically significant correlation between managing other's emotion, perception of emotion and utilization of emotion with academic performance, except for managing own emotion which has statistically significant correlation with academic performance. Nursing students from different ethnicity, mother and father's education background do not defer in EI scores except age and type of family.

**Conclusion:** Majority of the nursing students have higher level of emotional intelligence. Emotional intelligence is not significantly correlated with academic performance. This paper suggests that emotional intelligence is not guaranteed with the highest academic grades of students and that emotional intelligence components may be incorporated into the curriculum.

**Keywords:** Emotional Intelligence, Academic Performance, Nursing.

**1. INTRODUCTION**

Different studies have found that human cognition, including perception, attention, learning, memory, reasoning, and problem-solving, is significantly influenced by emotion. Emotion has a very strong effect on attention, especially when it comes to modifying attention selectivity and energizing behavior (Tyng et al., 2017). Emotional Intelligence (EI) combines two of the three states of mind cognition and affect, or intelligence and emotion. Emotional intelligence is an ability of an individual to perceive, control, and evaluate emotions of self and others. Mayer and Salovey (1993) defined "Emotional Intelligence" as "the subset of social intelligence that involves the

ability to monitor one's own and others' feelings and emotion, to discriminate among them and to use this information to guide one's thinking and actions.

Emotional Intelligence represents an ability to validly reason with emotions and use emotions to enhance thought. It can be characterized as the capability of people to comprehend their own emotions and to distinguish between the various types of experiences they experience. It is sophisticated knowledge, skill, and capability of people for recognizing, understanding, controlling, and assessing emotion and various emotional structures (Meher et al., 2021). Goleman (1995) suggested Emotional competency as the combination of Self-awareness, Self-management, Social awareness and Social skills.

Academic Performance (AP) is the completion of a certain topic area, according to Dimbisso (2009); academic performance is gauged by the students' attained grades, marks, and scores %. Academic performance is overall intellectual ability and skills of students reached in the academic content. One of the essential components around which the entire educational system revolves is student academic performance (Ali et al., 2020).

Both the lay and scientific communities have shown a keen interest in the idea of EI. According to research, social and emotional competence is linked to success in a variety of spheres of life, including instructional effectiveness, student learning, healthy interpersonal connections, and academic achievement (Sutten & Weatley, 2003). Intelligence Quotient (IQ) had always been used as a precursor of academic success. However, recent studies (Goleman 1996; Nwadinigwe & Obieke, 2012; Shah et al., 2014) have shown that IQ is not a good indicator of pupils' academic success on its own. According to Goleman (1996), IQ accounts for only 20% of a person's achievement and EQ (Emotional Quotient) for the remaining 80%. Students with low EI have trouble adjusting or ineffectively managing the demands of schoolwork in one way or another (Nwadinigwe & Obieke, 2012). Students who possess emotional intelligence, on the other hand, are able to regulate their emotions so that they are not carried away by the flow of negative elements, which gives them the confidence to deal with the challenging and complex college experience effectively and allows them to concentrate on their learning and perform academically (Shah et al., 2014).

EI helps students make a smooth transition from high school to college, and academically successful first-year students tend to have higher EI scores than academically failed ones. Positive associations between EI and academic success in school pupils have also been found (Hogan et al., 2010). EI abilities are essential to every facet of the professional nurse's employment, according to Hunt (2006). Emotions are a part of nursing practice and education by their very nature. The field of nursing is growing increasingly rigorous and demanding. According to nurses, the workplace is emotionally draining and difficult, which contributes to burnout, disability, stress, and excessive absenteeism. Hunt asserted that advancing emotional competence is an integral part of all clinical teaching and learning. Nursing students may not possess the emotional competence to understand the emotional demands associated with nursing education (Hanna et al., 2005).

According to Mayer et al. (2008), occupations requiring social interaction, particularly nursing, require high levels of EI. Planning, thinking creatively, refocusing attention, and inspiring others all require emotional intelligence (EI) (Mayer & Salovey, 1997; Mayer et al., 2016). In order to deliver high-quality and competent care, one must be able to manage, express, and regulate emotions (Mayer & Salovey, 1990). To deal with the stressful situations that healthcare workers encounter while delivering patient care, healthcare organizations look for nurses and other healthcare professionals that have high levels of EI (Cheshire et al, 2015).

Due to the requirements to gain academic information, clinical competence, and interpersonal skills, nursing education is difficult, demanding, and stressful (Freshwater & Stickley, 2004). The academic preparation, academic performance, purpose, health, and socioeconomic factors of nursing students all have an impact on whether they succeed or fail in their studies (Merkley, 2016). According to Merkley (2016), the success or failure of nursing students may depend on their EI skills. Research on the results of teaching EI in nursing education programs is currently accessible.

Emotionally intelligent students become self-motivated and self-directed learners (Brearly, 2006) who are able to assess their individual strengths and minimize potential weaknesses (Grace, 2004). The current research study will include two research instruments to study the relationship between EI, demographic variables, and nursing student academic performance.

Studies have shown that EI adds to individual cognitive-based performance above and beyond the degree due to general intelligence and is associated to academic and professional achievement (Romanelli et al., 2006). According to the EI research, people with greater information processing abilities often outperform others in cognitive activities (Saklofske et al., 2012). Research conducted by Jacob and Pavithran (2015), among 90 nursing students from selected nursing college, Kochi concluded that nursing students who have higher emotional intelligence did better on the final professional exam as well as the ongoing exam. Research conducted by Shrestha et al. (2021), among 280 students in Gandaki Medical College, Pokhara revealed positive and strong relationship between respondents' overall emotional intelligence and their academic achievement which showed that the higher their level of emotional intelligence, the better they perform academically.

Nursing school is a difficult and multifaceted process (Higginson, 2006; Jeffreys, 2004). Understanding, recognizing, and controlling one's own emotions as well as those of others are essential nursing student abilities for providing excellent patient care and fostering productive team dynamics in the healthcare context. EI is one of the necessary skill sets for academic achievement (Moss, 2005).

According to the findings of numerous experts, emotional intelligence affects academic achievement, this study aims to find out the level of emotional intelligence among the nursing students and to investigate its influence on their academic performance.

There is not sufficient research done on nursing field on association between EI and academic performance in Nepalese context. Since the respondents are future nursing professionals, it would be insightful to find out how emotional intelligence helps them to perform academically.

### **Research Question**

What are the levels of Emotional Intelligence of nursing students from selected nursing colleges?

What is the difference in Emotional Intelligence between students of different socio demographic background based on ethnicity, father and mother's education and type of family?

What is the difference in Academic Performance between students of different socio demographic background based on ethnicity, father and mother's education and type of family?

What is the relationship between Emotional Intelligence and Academic Performance?

**Objectives of the study**

**General Objective**

The general objective of this research is to study the association between Emotional Intelligence and Academic Performance of Nursing Students

**Specific Objectives**

- To assess the level of Emotional Intelligence of nursing students
- To compare effect of different socio demographic background based on ethnicity, father and mother’s education and type of family on Emotional Intelligence of students.
- To compare effect of different socio demographic background based on ethnicity, father and mother’s education and type of family on Academic Performance of students.
- To study the relationship between Emotional Intelligence and Academic Performance

**Hypothesis of the study**

- There is a significant difference between emotional intelligence of students from different socio demographic background.
- There is a significant difference between academic performance of students from different socio demographic background.
- There is a significant relationship between emotional intelligence and academic performance.

**Conceptual Framework**

This conceptual framework depicts the network of associations between study variables.

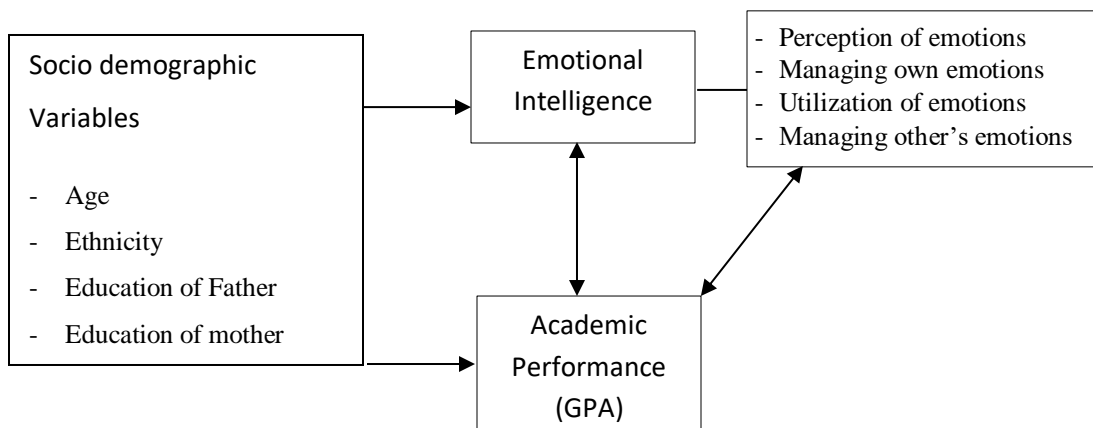


Fig: The conceptual framework showing effect of socio demographic variables on EI and Academic Performance (AP) measured in terms of Grade Point Average (GPA) and relationship between EI and its sub dimension with AP.

**Research Design and Method**

Analytical cross sectional research was conducted using survey method to find out the association between emotional intelligence and academic performance.

**Research Setting and Population**

The study was conducted in selected CTEVT affiliated Nursing Colleges (BP memorial Health Institute and Research Center, HAMS Nursing College, Kathmandu Nursing College, Nepal

Institute of Health Science, Norvic Institute of Nursing, Om Samaj Shaikshik Pratosthan and Vinayak College of Health Science) of Kathmandu. Students from PCL Nursing 3<sup>rd</sup> year were included as the study population.

### **Sampling**

Sample was selected using non-probability purposive sampling technique.

### **Sample Size**

Total number of PCL Nursing 3<sup>rd</sup> year students in CTEVT affiliated Nursing Colleges inside Kathmandu valley (N) = 700 (CTEVT-Bagmati Province Office, n.d.)

Using Yamane formula:

$$n = N/(1+N(e)^2)$$

Here, n = sample size

N = total no. of population (700)

E = allowable error (taking 5%)

$$\text{So, } n = 700/(1+700*(0.05)^2) \\ = 255$$

Sample size for the study (n) = 255

### **Research Criteria**

#### **Inclusion Criteria**

PCL Nursing 3<sup>rd</sup> year Students from selected nursing college who were present during data collection and those who consented for the study.

#### **Exclusion Criteria**

PCL Nursing 1<sup>st</sup> and 2<sup>nd</sup> year students

Those who were not willing to participate and those who didn't understand English

### **Instrumentation**

Instrument was divided into two parts.

Part 1 include socio – demographic data of the respondents and

Part 2 include standardized Assessing Emotion Scale

This scale contains 33 items and 4 sub-scales; Perception of emotion (Item 5, 9, 15, 18, 19, 22, 25, 29, 32 and 33), Managing own emotion (Item 2, 3, 10, 12, 14, 21, 23, 28 and 31), Managing other's emotion (Item 1, 4, 11, 13, 16, 24, 26 and 30) and Utilization of emotion (Item 6, 7, 8, 17, 20 and 27).

Schutte et al., (1998) found the internal consistency of the Assessing Emotions Scale, as measured by Cronbach's alpha, to be 0.90. Test-retest reliability of 0.78 for total scale scores. Convergent validity on the Assessing Emotions Scale was significantly correlated with increased attention to emotions, increased emotional clarity, and decreased alexithymia, which is the inability to recognize and express emotions.

The internal consistency of the Assessing Emotions scale in this study, as measured by Cronbach's alpha was found to be 0.84.

**2. FINDINGS OF THE STUDY**

**Socio- demographic Characteristics of the Respondents**

This section includes information regarding age, gender, type of family, ethnicity, educational status of mother, educational status of father and GPA obtained in final examination of 1<sup>st</sup> year. The variables are expressed in frequency and percentage.

**Table 1, Demographic Characteristics of the Respondents**

Characteristics	Frequency	Percentage
Age		
10-17 (Adolescent)	20	7.8
18-25 (Young Adult)	228	89.4
Above 25 (Later Adulthood)	7	2.7
Mean Age = 19.3, SD = 2.17		
Gender		
Male	3	1.2
Female	252	98.8
Types of Family		
Nuclear	193	75.7
Joint	59	23.1
Extended	3	1.2
Ethnicity		
Brahmin/Chhetri	123	48.2
Janajati	116	45.5
Dalit	10	3.9
Madhesi	6	2.4

As shown in Table 1, the demographic characteristics of the respondents' shows that majority (89.4%) of the respondents were of age group 18 – 25 with the mean age of 19.3 and the standard deviation  $\pm 2.173$ . Regarding gender, most of them (98.8%) were female and only 1.2% were male. Similarly, 75.7% belonged to nuclear family and nearly half of the respondent (48.2%) belonged to Brahmin/Chhetri followed by Janajati with 45.5%

**Table 2, Educational Status of Father, Mother and GPA of Respondents**

Characteristics	Frequency	Percentage
Educational Status of Father		
Unable to read and write	12	4.7
Able to read and write	243	95.3
Can read and write only	45	18.5
Primary Level	9	3.7
Lower Secondary	33	13.6
Secondary	37	15.2
Higher Secondary	77	31.7
Bachelor or Above	42	17.3
Educational Status of Mother		

Unable to read and write	39	15.3
Able to read and write	216	84.7
Can read and write only	63	29.2
Primary Level	17	7.9
Lower Secondary	35	16.2
Secondary	39	18
Higher Secondary	47	21.8
Bachelor or Above	15	6.9
GPA		
A (3.2 – 4)	137	53.7
B (2.4 – 3.19)	117	45.9
C (1.6 – 2.39)	1	0.4
Mean GPA	3.18 ± 0.24	

Table 2 depicts that most of the respondents' father (95.3%) were able to read and write and among them 77% had attained higher secondary level of education. Similarly, 84.7% of the respondent's mother were able to read and write and among them 63% were able to read and write only. Regarding GPA, more than half (53.7%) secured GPA of A in their PCL Nursing 1<sup>st</sup> year final examination.

### Emotional Intelligence of the Respondents

**Table 3, AES Categorization**

Level	Score	Frequency	Percentage
High Emotional Intelligence	122 – 165	190	74.5
Moderate Emotional Intelligence	78 – 121	65	25.5
Low Emotional Intelligence	< 78	0	0

Table 3 shows the categorization of Emotional Intelligence based on the total score obtained. Score ranged from 33 to 165. All the statements were scored 1 for strongly disagree, 2 disagree, 3 neutral, 4 agree and 5 strongly agree except for statement no 5, 28 and 33 where scoring was 5 for strongly disagree, 4 disagree, 3 neutral, 2 agree and 1 strongly agree. Based on the total score those who scored between 122 – 165 belonged to the category of high emotional intelligence, 78 – 121 moderate emotional intelligence and score between 33 – 77 was categorized as low emotional intelligence. Findings of the study showed 74.5% of the respondents had high emotional intelligence.

**Table 4, Descriptive Analysis of Domains of Emotional Intelligence**

Domains	Mean Score of Respondents
Emotional Intelligence	127.67 ± 12.475
Subscales	
Perception of emotion	36.27 ± 4.98
Managing own emotion	35.86 ± 4.46
Managing others emotion	31.47 ± 3.54
Utilization of Emotion	24.07 ± 3.18

Table 4 depicts that the Mean ± SD of the overall score of EI is 127.67 ± 12.475. Mean ± SD of the domains of EI are 36.64±4.98, 35.86±4.46, 31.47±3.54, 24.07±3.18 for Perception of emotion, Managing own emotion, Managing other’s emotion and Utilization of emotion respectively.

**Correlation between Emotional Intelligence and Academic Performance**

**Table 5. Correlation between Emotional Intelligence and Academic Performance**

Variable 1	Variable 2	Correlation Coefficient	p value
Emotional Intelligence	Academic Performance	0.098	0.119
Sub dimensions of EI			
Managing own emotions	Academic Performance	0.127	0.043*
Managing other’s emotion	Academic Performance	0.038	0.551
Perception of emotion	Academic Performance	0.109	0.083
Utilization of emotion	Academic Performance	-0.006	0.918

\*. Significant at the 0.05 level (2-tailed)

Table 5 depicts that Emotional Intelligence is not significantly correlated with Academic performance. Similarly, sub dimensions of Emotional Intelligence, Managing other’s emotion, Perception of emotion and Utilization of emotion are also not significantly correlated with Academic Performance. Whereas, being the p value < 0.05, Managing own emotion was found to be significantly correlated with Academic Performance (p = 0.043).

**Comparison of Emotional Intelligence and GPA of Respondents from different socio demographic background**

**Table 6. Analysis of Variance**

Socio demographic Variable		Sum Squares	df	Mean Square	F	Sig.
Age	EI	Between Groups	1025.811	2	512.906	3.357
		Within Groups	38506.173	252	152.802	
	GPA	Between Groups	0.587	2	0.293	5.433
		Within Groups	13.603	252	0.054	
Ethnicity	EI	Between Groups	994.181	3	331.394	2.158
		Within Groups	38537.804	251	153.537	
	GPA	Between Groups	0.142	3	0.047	0.844
		Within Groups	14.048	251	0.056	
Education of mother	ofEI	Between Groups	515.764	6	85.961	0.546
		Within Groups	39016.220	248	157.323	
	GPA	Between Groups	0.144	6	0.024	0.423
		Within Groups	14.046	248	0.057	
Education of father	ofEI	Between Groups	1560.713	6	260.119	1.699
		Within Groups	37971.271	248	153.110	



	GPA	Between Groups	0.352	6	0.059	1.050	0.394
		Within Groups	13.838	248	0.056		
Type of Family	EI	Between Groups	1211.554	2	605.777	3.984	0.020*
		Within Groups	38320.430	252	152.065		
	GPA	Between Groups	0.535	2	0.268	4.941	0.008*
		Within Groups	13.654	252	0.054		

\*. Significant at the 0.05 level

Table 6 shows the difference in EI score and GPA of students from various socio demographic background. A one-way ANOVA showed that effect of age on EI was significant,  $F(2, 252) = 3.357, p = 0.036$ . Its effect on GPA was significant as well,  $F(2, 252) = 5.433, p = 0.005$ . Age was categorized into 3 categories, Adolescent (10-17), Young Adult (18-25) and Later Adulthood (Above 25). It also showed that effect of type of family on EI was significant,  $F(2, 252) = 3.984, p = 0.020$  and also significant on GPA,  $F(2, 252) = 4.941, p = 0.008$ . Type of family considered was nuclear, joint and extended. As shown in the table, effect of Ethnicity on EI was not significant,  $F(3, 251) = 2.158, p = 0.093$  and its effect was not significant on GPA as well,  $F(3, 251) = 0.844, p = 0.471$ . The ethnicities considered were Brahmin/Chhetri, Janajati, Dalit and Madhesi. Similarly effect of Education of Mother on EI was also not significant,  $F(6, 248) = 0.546, p = 0.773$  and also not significant on GPA  $F(6, 248) = 0.423, p = 0.863$ . In addition effect of Education of Father on EI was also insignificant,  $F(6, 248) = 1.699, p = 0.122$  and also insignificant on GPA,  $F(6, 248) = 1.050, p = 0.017$ . The education levels considered were unable to read and write, able to read and write, can read and write only, Primary level, Lower Secondary level, Secondary, Higher Secondary, Bachelor and above.

**Table 7. Post hoc test for Age and Emotional Intelligence (TUKEY HSD)**

Age	Age	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
10-17 Adolescence	18-25 Young Adult	-7.090*	2.883	.039	-13.89	-.29
	above 25 Later adulthood	-10.379	5.429	.137	-23.18	2.42
18-25 Young Adult	10-17 Adolescence	7.090*	2.883	.039	.29	13.89
	above 25 Later adulthood	-3.288	4.743	.768	-14.47	7.89
above 25 Later adulthood	10-17 Adolescence	10.379	5.429	.137	-2.42	23.18
	18-25 Young Adult	3.288	4.743	.768	-7.89	14.47

\*. The mean difference is significant at the 0.05 level.

Table 7 reveals a post hoc Tukey test which showed that mean score for EI of Age group 10 - 17 was significantly different than 18 – 25 whereas age above 25 was not significantly different from the other two groups.

**Table 8. Post hoc test for Age and GPA (TUKEY HSD)**

Age	Age	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
10-17 Adolescence	18-25 Young Adult	-.05220	.05418	.601	-.1799	.0755
	above 25 Later adulthood	.23273	.10203	.060	-.0078	.4733
18-25 Young Adult	10-17 Adolescence	.05220	.05418	.601	-.0755	.1799
	above 25 Later adulthood	.28493*	.08915	.004	.0747	.4951
above 25 Later adulthood	10-17 Adolescence	-.23273	.10203	.060	-.4733	.0078
	18-25 Young Adult	-.28493*	.08915	.004	-.4951	-.0747

\*. The mean difference is significant at the 0.05 level.

Table 8 shows a post hoc Tukey test which showed that GPA of Age group 18 - 25 differed significantly from age group above 25 whereas age 10 -17 was not significantly different from the other two groups.

**Table 9. Post hoc test for Type of Family and Emotional Intelligence (TUKEY HSD)**

Type of family	Type of family	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Nuclear	Joint	-5.152*	1.834	.015	-9.48	-.83
	Extended	.826	7.175	.993	-16.09	17.74
Joint	Nuclear	5.152*	1.834	.015	.83	9.48
	Extended	5.977	7.298	.692	-11.23	23.18
Extended	Nuclear	-.826	7.175	.993	-17.74	16.09
	Joint	-5.977	7.298	.692	-23.18	11.23

\*. The mean difference is significant at the 0.05 level.

Table 9 reveals a post hoc Tukey test which showed that mean score of EI from Nuclear and Joint family differed significantly at  $p < .05$  and mean score of EI from Extended family was not significantly different from the other two groups.

**Table 10. Post hoc test for Type of Family and GPA (TUKEY HSD)**

Type of Family	Type of Family	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Nuclear	Joint	.07930	.03463	.059	-.0023	.1609
	Extended	-.27261	.13543	.111	-.5919	.0467
Joint	Nuclear	-.07930	.03463	.059	-.1609	.0023
	Extended	-.35191*	.13777	.030	-.6767	-.0271
Extended	Nuclear	.27261	.13543	.111	-.0467	.5919
	Joint	.35191*	.13777	.030	.0271	.6767

\*. The mean difference is significant at the 0.05 level.

Table 10 reveals a post hoc Tukey test which showed that GPA differed significantly between Joint and Extended family whereas, GPA from Nuclear family was not significantly different from the other two groups.

### 3. DISCUSSION

A descriptive cross sectional study was carried out to find out association between Emotional Intelligence and Academic Performance among Nursing Students of Selected Nursing Colleges, Kathmandu, for which information was collected using survey method. The data were collected, analyzed and presented systematically with the help of tables.

The finding of the study revealed that majority of the nursing students (74.5%) had high Emotional Intelligence and 25.5% of them had moderate emotional intelligence. This finding is congruent with the findings of the studies conducted by Pradhan et al. (2021) where among 423 undergraduate nursing students from three colleges of Morang District of Nepal, majority (75.4%) had a high level of EI score and 24.6% of the students had a moderate level of EI score. The result of the present study corroborate with the earlier findings of Shrestha and Mandal (2021), who found that majority 81.8% of nursing students had a high level of emotional intelligence and 18.2% had a moderate level of emotional intelligence. This finding is also in congruent with the study conducted by Ramadan (2020), who found that 77% of the nursing student had high level of emotional intelligence.

This study revealed that there is no significant association between emotional intelligence and academic performance ( $r = 0.098$ ,  $p$  value = 0.119). Given that this study's definition of academic achievement was restricted to a student's GPA, other variables of nursing performance were not taken into account. The more individualized and emotional aspects of nursing care may not always be reflected in a student's GPA, which only considers cognitive assessments like exams. Supporting the result, study done on emotional intelligence and successful completion of nursing courses in associate degree nursing students conducted by Benington et al. (2020) found that EI levels had no relationship to academic performance. In addition study conducted by Cheshire et al. (2015) on comparing traditional measures of academic success with emotional intelligence scores in nursing students also revealed no correlation between EI scores and the GPA ( $r = 0.075$ ,  $p$  value = 0.497). Supporting the finding of this study, a descriptive correlational research study conducted by Beauvais et al., (2014) on factors related to academic success among nursing students, academic success was not correlated with overall emotional intelligence. In congruent, research conducted by Ademola et al. (2010), to investigate the extent to which the level of creativity and emotional intelligence influenced the level of academic achievement, concluded that an emotionally intelligent student are not likely to be a high academic achiever. In addition, the results of correlational analysis in a research conducted by Afridi et al. (2021) showed there is no correlation between Emotional intelligence and Academic Achievement among university students, with a correlation value  $r = -0.45$ ,  $p = 0.51$ . On contrary, findings of the research conducted by Suleman et al. (2019) revealed that there was a strong positive relationship ( $r = 0.880$ ) between emotional intelligence and academic success among undergraduate students. Similarly, research conducted by Manjusha et al. (2017) also revealed that emotional intelligence and academic performance are statistically significant positive relationship. In addition, research conducted by Codier and Odell (2013) also showed that emotional intelligence and grade point average of nursing students is correlated significantly ( $r = 0.25$ ).

This study revealed that there is no any association between sub dimensions of Emotional Intelligence; perception of emotion, managing other's emotion and utilization of emotion with academic performance, except managing owns emotion was significantly correlated with academic performance ( $r = 0.127, p = 0.043$ ). This may be because, students who are able to manage their own emotion enable them to concentrate, learn and excel in academic field. In congruent with this finding, research conducted by Beauvais et al. (2014) also concluded that managing own emotions score had a weak but statistically significant correlation with academic performance,  $r(121) = 0.276, p = 0.002$  whereas other dimensions were not significantly correlated with academic performance. Research conducted by Cheshire et al. (2015) concluded that none of the subscale scores correlated with GPA; perception of emotion ( $p = 0.91$ ), managing own emotion ( $p = 0.35$ ), managing other's emotion ( $p = 0.68$ ) and utilization of emotion (0.386). This finding is congruent with this study except for managing own emotion.

The findings of this study revealed that there is statistically significant relationship  $F(1,253) = 9.612, p = 0.002$  between age and EI and also showed significant relationship between age and GPA. This can be explained by lifelong learning and accumulated knowledge. With age, people build relationships and doing so requires paying attention to other people's experience and feeling compassion (Catherine & Sanderson, 2022). When recognizing emotion in another person's facial expression and vocal tonality, one may use their visual or auditory processing skills. Affective states that alter attention and perception can be used in a context to facilitate thinking, which may affect knowledge-related and flexible reasoning skills. The ability to understand emotions could be affected by both fluid and crystallized abilities: Learning about emotions involves analyzing emotional data, making sense of it, and developing emotional intelligence. As the crystallized intelligence is gained with age, so does the emotional intelligence (Volker, 2020).

Relationship between Type of family and EI,  $F(2,252) = 4.164, p = 0.093$  was also found to be statistically significant whereas type of family was not statistically significant with GPA. Family is the focal socializing unit in a person's life. The type of family i.e. nuclear, joint and extended makes on impact on the child's learning, values and personality. Developmental theories explain the role perceived by family plays vital role during adolescent and youth age. Children learn by their interactions with parents, observing social interaction of adults and communication specially listening (Kondiba & Hari, 2018). Supporting this, in research conducted by Oztimurlenk (2019) age was found to be a significant factor influencing the Emotional Intelligence ( $F = 2.877, p = 0.021$ ). On contrary study conducted by Shrestha and Mandal (2021) found no statistically significant association between age ( $p = 1.00$ ) and type of family ( $p = 1.00$ ). There was no any statistically significant association between other demographic variables such as Ethnicity, Education of mother and Education of father with Emotional Intelligence as well as GPA. The reason may be that Emotional Intelligence is highly associated with positive psychology which includes individual performance, happiness, wellbeing and an individual's meaning of life (Bar-On, 2010). Supporting this finding, study conducted by Jacob and Pavithran (2015) showed no association between ethnicity, education of mother and education of father. This study also showed no association between EI and age and type of family, which was incongruent with the finding of this research. Study conducted by Pradhan et al., (2021) also revealed no statistically significant association between total EI score and selected demographic variables such as age, type of family, mother's education and father's education, which is congruent with the finding of this research except for age and type of family.

#### 4. CONCLUSION

The current research aimed to identify the level of emotional intelligence among nursing students and its association with academic performance. Findings reveal that majority of the nursing students have high emotional intelligence. There is no any statistically significant correlation between emotional intelligence and academic performance of nursing students. Regarding sub dimensions of Emotional Intelligence, there is no any statistically significant correlation between managing other's emotion, perception of emotion and utilization of emotion with academic performance, except for managing own emotion which has statistically significant correlation with academic performance. Nursing students from different ethnicity, mother and father's education background do not defer in EI scores whereas EI scores differs significantly with age and type of family.

#### 5. Acknowledgement

I would like to thank Campus Chief of HAMS Nursing College, BP memorial Health Institute and Research Center, Kathmandu Nursing College, Nepal Institute of Health Science, Norvic Institute of Nursing, Om Samaj Shaikshik Pratisthan and Vinayak College of Health Science for granting permission and providing necessary co - operation and support throughout the data collection process. Furthermore, I would like to acknowledge my friends, family, colleagues and entire respondents for their valuable time, information, and co - operation.

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