

## Relationship Between Emotional Intelligence And Efficiency Among Nursing Students, Pre And Post Covid-19 Pandemic

Ms. Shivani Shirpurkar<sup>1</sup>,  
Dr.Kavita Patil<sup>2</sup>

PhD Scholar,

<sup>1</sup>Dr. Panjabrao Deshmukh Institute of Management  
Technology and Research, Nagpur

<sup>2</sup>Associate Professor,

Dr. Panjabrao Deshmukh Institute of Management  
Technology and Research, Nagpur.

### Abstract

The present research work has analyzed the relationship between Emotional intelligence and efficiency among nursing students, pre and post COVID-19 pandemic. For testing the given hypothesis and for fulfillment of the required objective we have used Wong and Law Emotional Intelligence Scale, WLEIS for measuring the emotional intelligence of nursing students and General Self-Efficacy Scale (GSE) for measuring the efficiency of the nursing students. For that purpose, we have collected data of 150 sample points. Before covid-19 more than 53% respondents are highly emotionally intelligent while the only 13% respondents were very low emotionally intelligent. Similarly, almost 60% respondents were highly efficient and the only 20% respondents were low efficient. After covid-19 more than 65% respondents are highly emotionally intelligent while the only 6.7% respondents were very low emotionally intelligent. Similarly, almost 77% respondents were highly efficient and the only 10% respondents were low efficient. The change in the numbers clearly showed the impact of Covid-19 on the relationship between emotional intelligence and efficiency among nursing students. For testing purpose,

we have used t test which turns out in the form of the rejection of our null hypothesis and we have concluded that there is an impact of covid-19 on the relationship between emotional intelligence and efficiency among nursing students.

Keywords: Emotional intelligence, Efficiency, Nursing Students, COVID-19 pandemic

## I. INTRODUCTION

Since March of the year 2020, the government of India has been putting preventive measures into place in an effort to stop the spread of the new coronavirus (SARS-Cov-2). According to [3], some of these prophylactic methods include a quarantine, social separation, isolation, and even imprisonment. These precautions are being taken in the hope that they will halt any further transmission of the virus. One of the consequences of these measures was a significant shift away from the conventional approaches to getting a university education and toward a model of getting a university education that is known as university at home. This shift was one of the ramifications. In a word, it was a transition from learning via interactive in-person classrooms to learning through remote learning, and it took place inside a social fabric of uncertainty and high expectations. This has forced a continuing refurbishment of the official educational training processes in a country that already has a great number of technological impediments. [17] have shown via their empirical research that recent, expanding scientific literature on student psychological well-being under COVID-19 has suggested that students' psychological well-being is low, with impairments in mental and physical health. This study was carried out at the COVID-19 conference [18]. The students' psychological well-being as well as their mental health has been shown to deteriorate, according to other longitudinal research (Savage et al., 2020). In the year 2020, university students in India reported a considerable frequency of anxious feelings, insomnia, and feelings of melancholy while they were confined.

The support of family members was shown to be a protective element of well-being, especially in women, according to the research [11]. It was found that more than half of the student population in the United Kingdom suffered mental health difficulties such as stress, worry, melancholy, and even symptoms of psychological trauma. This was verified by surveying the student population. This was uncovered as a result of study carried out inside the territory. While the subject was confined, it was found that self-efficacy and physical exercise appeared to be coping mechanisms. This discovery was made within the same time period as the previous one [6]. Students at universities in Sweden have also reported having negative experiences with their mental health. These negative experiences include feelings of isolation, boredom, worry, tension, and depressive symptoms. Students have also reported worrying about their education, money, and the possibility that they might be contagious. In addition, students reported high-stress negative impacts induced by the pandemic, such as the interruption of their studies, confinement, and uncertainty, all of which had an influence on their academic self-efficacy.

## **II. LITERATURE REVIEW**

These reported consequences all had an effect on their academic self-efficacy [6]. It was observed that students in India felt more nervous when they were limited around the year 2020. Students who reported higher levels of anxiety also reported lower levels of academic self-efficacy, with the exception of male students, who reported higher levels of academic self-efficacy than their female counterparts. Students who reported higher levels of anxiety also reported lower levels of academic self-efficacy [1]. The emphasis of research has been placed not just on individual resources but also on those associated with academic institutions and contexts. Students at universities have additional outlets that provide them happiness, which illustrates that despite the problems and hurdles they experience, students at universities have discovered places inside the

environment of the institution where they may find satisfaction. This lends credence to the notion that self-efficacy, academic satisfaction, and a feeling of belonging are arranged in protective combinations [3] [9]. During this period, a student's perception of their own level of self-efficacy may serve as a buffer against the strain and unease that they are experiencing [14] [5]. It has been demonstrated that there is an association between this component and academic success that occurred during the COVID-19 outbreak [2]. A study that was carried out in China came to the conclusion that there is a positive correlation between academic self-efficacy and student well-being [7] [9]. In addition, a different study that was carried out in September 2020 found that university students reported having good psychological well-being when some of the preventative measures were lifted by April 2020, such as the return to classes at some universities. This was discovered by a different research team. This information was discovered in the report that was distributed in September of the year 2020. [8] The emotional self-efficacy of university students was investigated by researchers from an Italian institution, and they came to the conclusion that emotional self-efficacy had an inverse connection with the fear of contagion. Low levels of emotional and intellectual self-efficacy have been connected to feelings of depression as well as impairments in learning skills during confinement. This relationship has been shown [12].

#### **A. Objective of the Study**

To find the impact of COVID-19 on Emotional Intelligence and Efficiency among nursing students, pre and post pandemic.

#### **B. Hypothesis of the Study**

Covid- 19 has impacted relationship between Emotional intelligence and Efficiency among nursing students.

### **III RESEARCH METHODOLOGY**

For testing the given hypothesis and for fulfilment of the required objective we have used Wong and Law Emotional Intelligence Scale, WLEIS for measuring the emotional intelligence of nursing students and General Self-Efficacy Scale

(GSE) for measuring the efficiency of the nursing students. For that purpose, we have collected data of 150 sample points. We used Pearson’s correlation test for testing the relation between Emotional intelligence and efficiency among nursing students, also used the t test for comparing the effect of covid -19 on Emotional intelligence and efficiency among nursing students. All the analysis is done with the help of the SPSS software.

**General Self-Efficacy Scale (GSE)**

**Scoring:**

	Not at all true	Hardly true	Moderately true	Exactly true
All questions	1	2	3	4

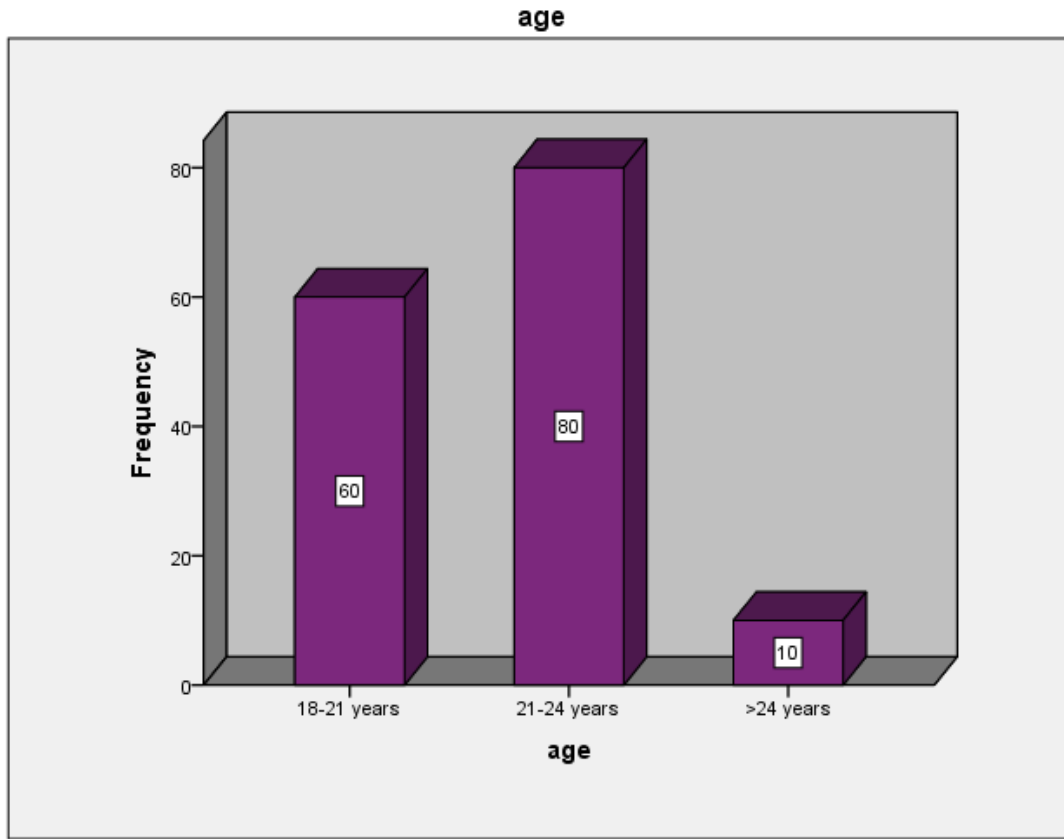
The total score is calculated by finding the sum of the all items. For the GSE, the total score ranges between 10 and 40, with a higher score indicating more self-efficacy.

**Demographic variables:**

**1. Age:**

**age**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 18-21 years	60	40.0	40.0	40.0
21-24 years	80	53.3	53.3	93.3
>24 years	10	6.7	6.7	100.0
Total	150	100.0	100.0	

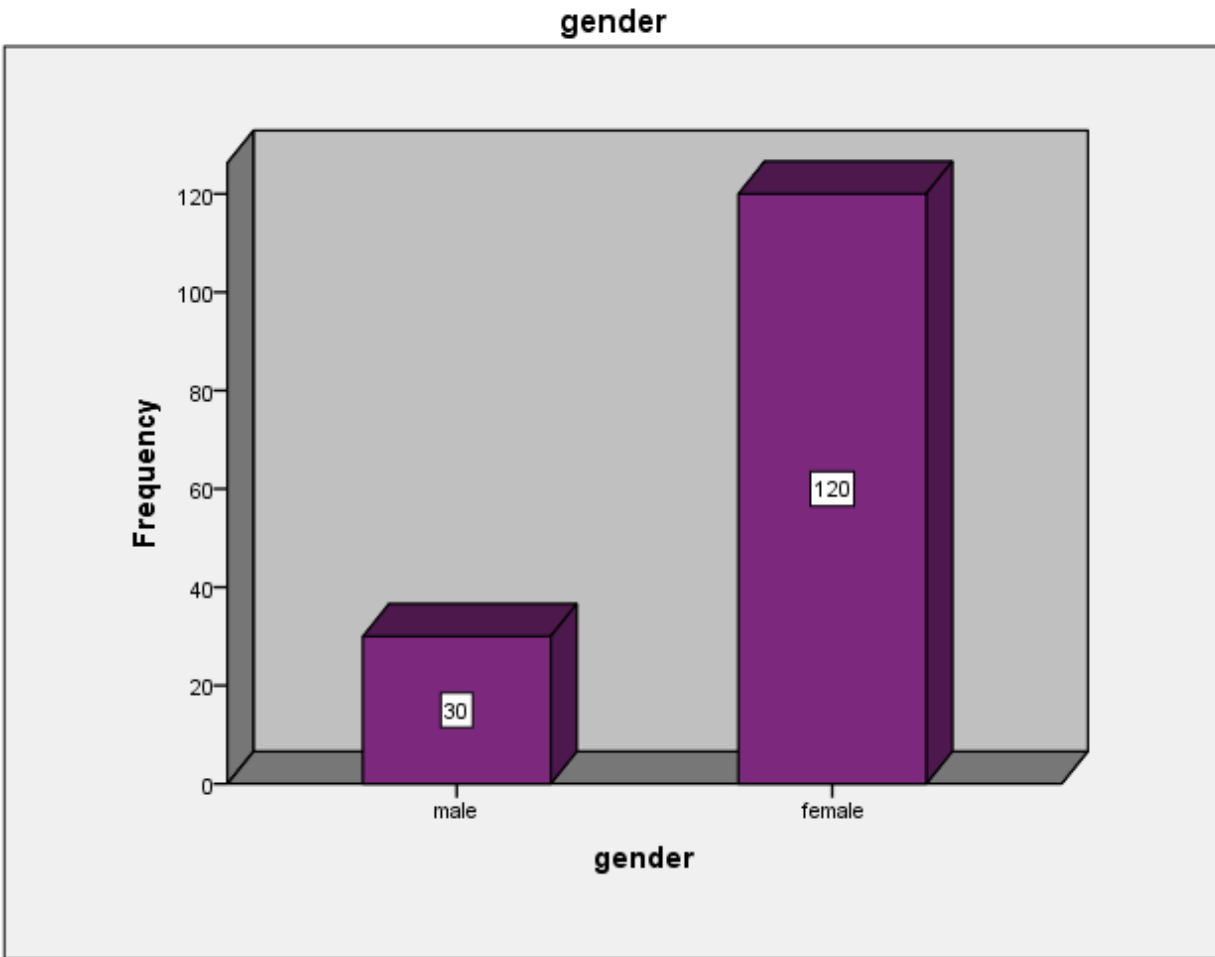


**Interpretation:** using the above bar graph and with the help of collected data on 150 nursing students we can interpret that 40% respondents are belong to age group of 18-21 years, 53.3% respondents are belong to age group of 21-24 years and the rest 6.7% respondents are belong to age group of >24 years.

**2. Gender:**

**gender**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	30	20.0	20.0	20.0
	female	120	80.0	80.0	100.0
	Total	150	100.0	100.0	

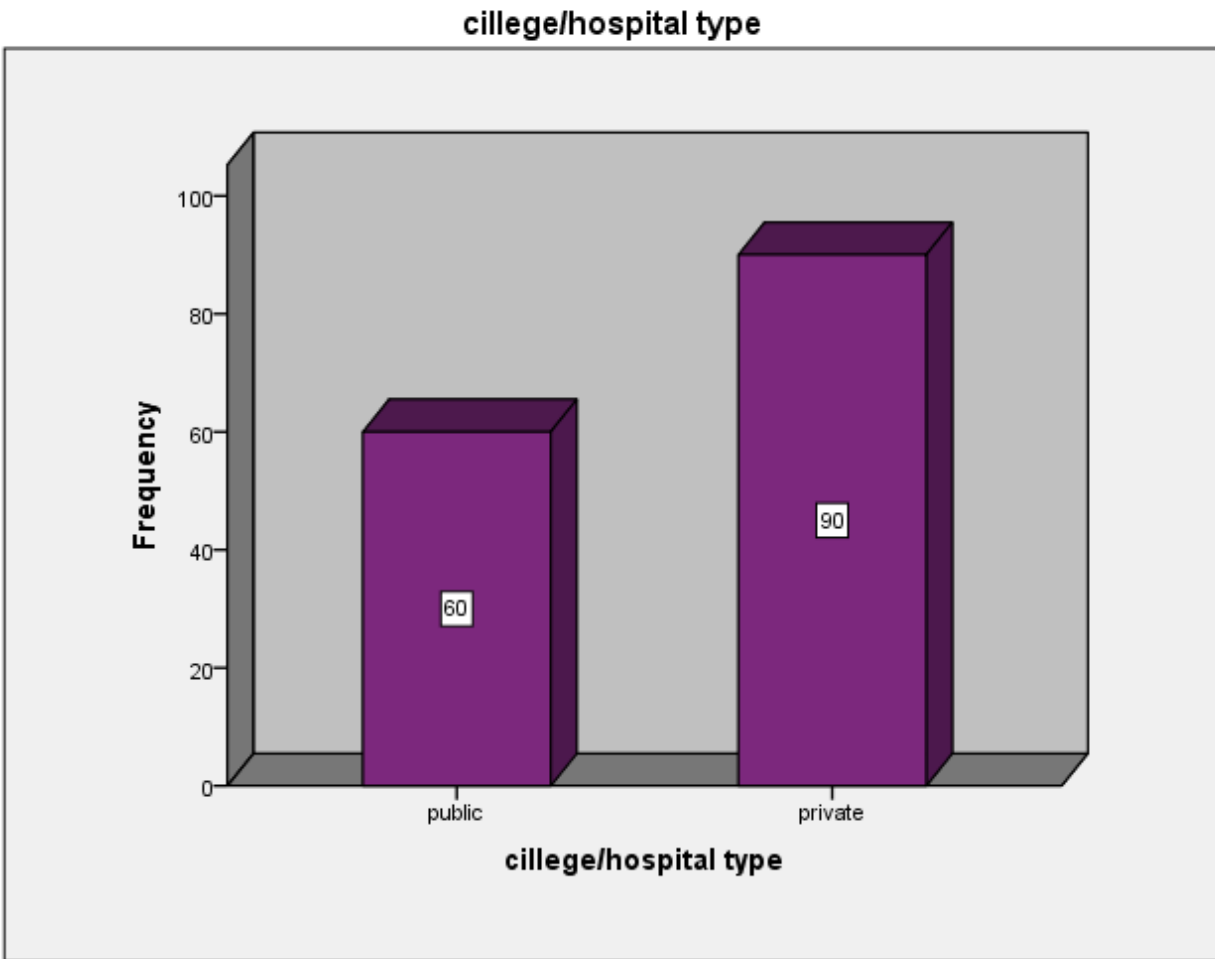


**Interpretation:** using the above bar graph and with the help of collected data on 150 nursing students we can interpret that 80% respondents are female while the rest only 20% respondents are male in our sample.

**3. college/hospital type:**

**cillege/hospital type**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	public	60	40.0	40.0	40.0
	private	90	60.0	60.0	100.0
	Total	150	100.0	100.0	



**Interpretation:** using the above bar graph and with the help of collected data on 150 nursing students we can interpret that only 40 % respondents are enrolled in public colleges/ hospitals while the rest 60% respondents are enrolled in private colleges/ hospitals.

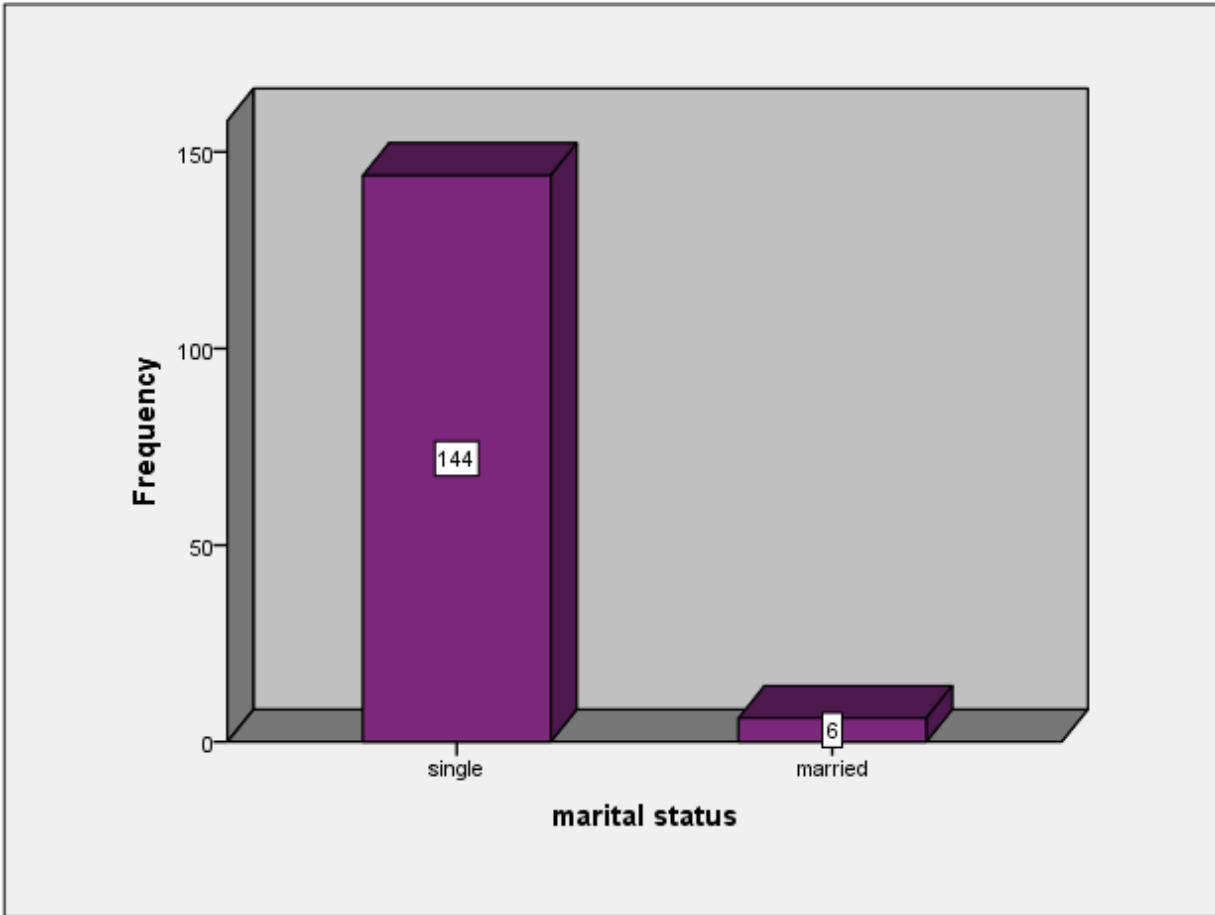
**4. Marital Status:**

**marital status**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid single	144	96.0	96.0	96.0
married	6	4.0	4.0	100.0
Total	150	100.0	100.0	



**marital status**

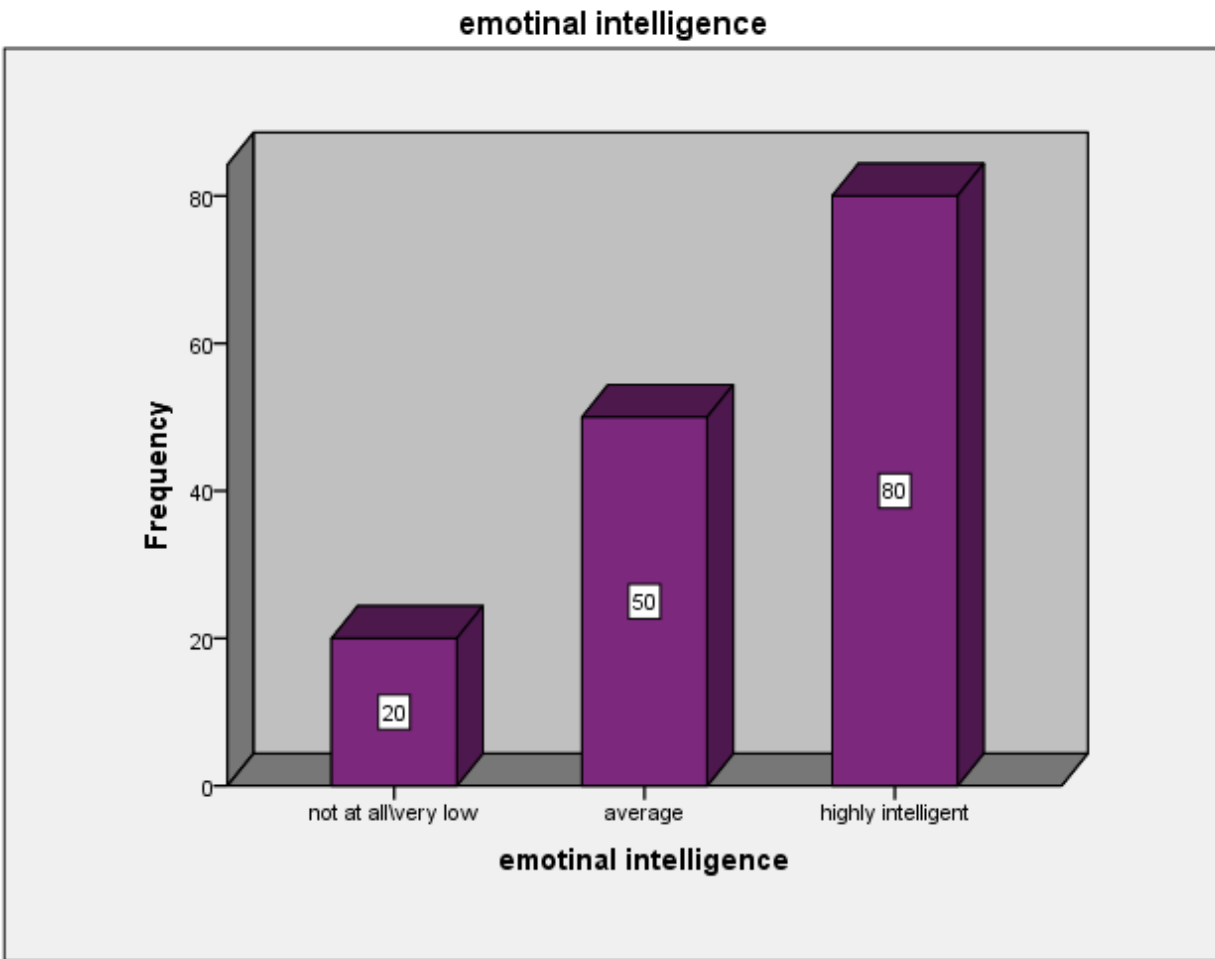


**Interpretation:** using the above bar graph and with the help of collected data on 150 nursing students we can interpret that only 4% respondents are married while the rest all other 96% respondents are single.

**Before covid-19:**

**emotional intelligence**

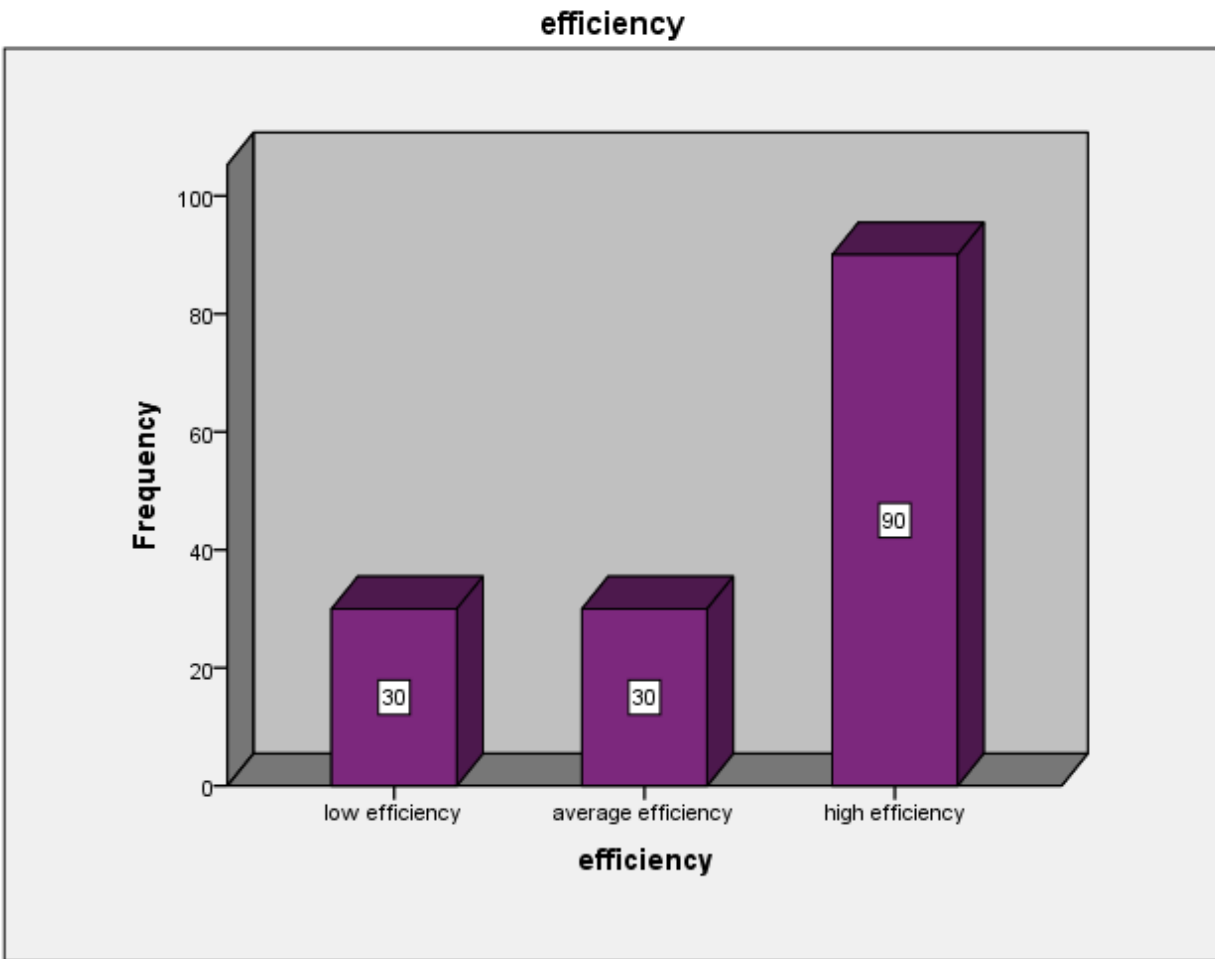
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid not at all	20	13.3	13.3	13.3
very low average	50	33.3	33.3	46.7
highly intelligent	80	53.3	53.3	100.0
Total	150	100.0	100.0	



**Interpretation:** in the scenario of before covid-19 using the above bar graph and with the help of collected data on 150 nursing students we can interpret that 80 out of 150 that is 53.3% respondents have very high emotional intelligence, 50 out of 150 that is 33.3% respondents have an average emotional intelligence and the rest 20 out of 150 that is 13.3% respondents have very low/not at all emotional intelligence.

**efficiency**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	low efficiency	30	20.0	20.0	20.0
	average efficiency	30	20.0	20.0	40.0
	high efficiency	90	60.0	60.0	100.0
	Total	150	100.0	100.0	



**Interpretation:** in the scenario of before covid-19 using the above bar graph and with the help of collected data on 150 nursing students we can interpret that 90 out of 150 that is almost 60% respondents have very high efficiency, 30 out of 150 that is almost 20% respondents have an average efficiency and the rest 30 out of 150 that is almost 20% respondents have low efficiency.

**Test for checking the relation between emotional intelligence and efficiency of nursing students:**

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	87.367 <sup>a</sup>	4	.000
Likelihood Ratio	88.218	4	.000
Linear-by-Linear Association	73.520	1	.000
N of Valid Cases	150		

a. 2 cells (22.2%) have expected count less than 5. The minimum expected count is 4.00.

**Symmetric Measures**

	Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.
Interval by Interval Pearson's R	.702	.050	12.006	.000 <sup>c</sup>
Ordinal by Ordinal Spearman Correlation	.702	.052	11.982	.000 <sup>c</sup>
N of Valid Cases	150			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

**emotional intelligence \* efficiency Crosstabulation**

Count		efficiency			Total
		low efficiency	average efficiency	high efficiency	
emotional intelligence	not at all/very low	15	4	1	20
	average	13	20	17	50
	highly intelligent	2	6	72	80
Total		30	30	90	150

**Interpretation:** in the scenario of before covid-19 using the above tables and with the help of collected data on 150 nursing students we can interpret that the p value is less than 0.05 in the first and second table so there is a significant relation between emotional intelligence and efficiency of nursing students. Also from the second table, we can interpret that the correlation between emotional intelligence and efficiency of nursing students is positively high as the value of Pearson's as well as spearman's correlation is 0.702. From the third table we can see the respondents which are highly emotionally intelligent are

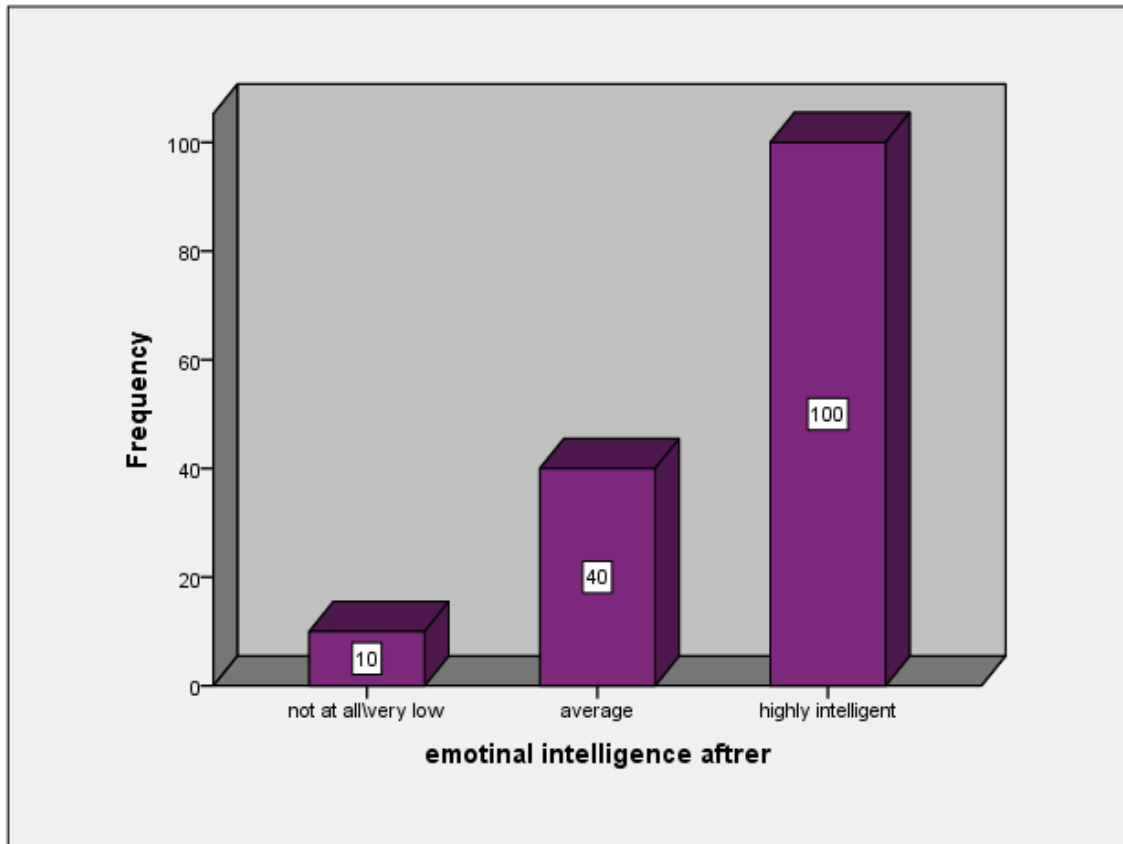
highly efficient as well and similarly the respondents which are average emotionally intelligent; are average efficient.

**After covid-19:**

**emotional intelligence after**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not at all/very low	10	6.7	6.7	6.7
	average	40	26.7	26.7	33.3
	highly intelligent	100	66.7	66.7	100.0
	Total	150	100.0	100.0	

**emotional intelligence after**

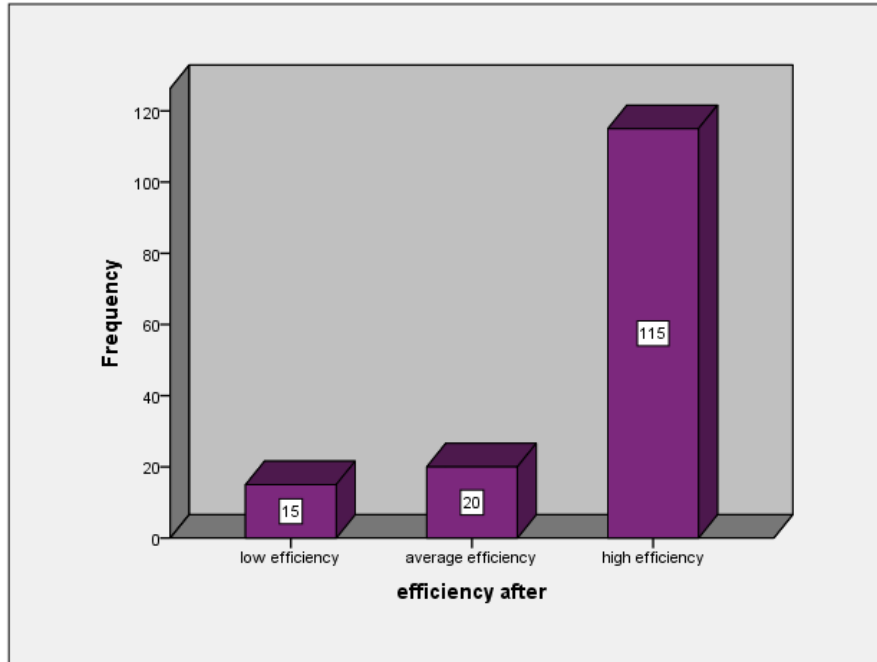


**Interpretation:** in the scenario of after covid-19 using the above bar graph and with the help of collected data on 150 nursing students we can interpret that 100 out of 150 that is 66.7% respondents have very high emotional intelligence, 40 out of 150 that is 26.7% respondents have an average emotional intelligence and the rest 10 out of 150 that is 6.7% respondents have very low/not at all emotional intelligence.

**efficiency after**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid low efficiency	15	10.0	10.0	10.0
average efficiency	20	13.3	13.3	23.3
high efficiency	115	76.7	76.7	100.0
Total	150	100.0	100.0	

**efficiency after**



**Interpretation:** in the scenario of after covid-19 using the above bar graph and with the help of collected data on 150 nursing students we can interpret that 115 out of 150 that is almost 76.7% respondents have very high efficiency, 20 out of 150 that is almost 13.3% respondents have an average efficiency and the rest 15 out of 150 that is almost 10% respondents have low efficiency.

**Hypothesis:** Covid 19 has impacted relationship between emotional intelligence and efficiency among nursing students.

**Paired Samples Statistics**

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 before covid-19	104.5067	150	33.95926	2.77276
after covid-19	113.6667	150	28.66133	2.34019

0

**Paired Samples Correlations**

	N	Correlation	Sig.
Pair 1 before covid-19 & after covid-19	150	.736	.000

**Paired Samples Test**

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	before covid-19 - after covid-19	-9.16000	23.28495	1.90121	-12.91681	-5.40319	-4.818	149	.000

**Interpretation:** we have used the pair t test for testing the effect of covid-19 on the relationship between emotional intelligence and efficiency among nursing students. From the first table it is very clear that the mean value of emotional intelligence and efficiency of a nursing student before covid-19 is 104.50 while the mean value of emotional intelligence and efficiency of a nursing student after covid-19 is 113.67, so it is seen with the descriptives itself that there is an impact of covid-19 on the relationship between emotional intelligence and efficiency among nursing students.

From the second table we can see the correlation between the scores of emotional intelligence and efficiency to before covid and the after covid-19 scenarios, as the value of correlation 0.736 so we can interpret that covid-19 positively impacted the efficiency and emotional intelligence of nursing students.

From the third table we can interpret that there is a significant difference between the relationship of emotional intelligence and efficiency before covid-19 and the relationship of emotional intelligence and efficiency after covid-19, as the p-value is less than 0.05 so we do not have enough evidences for supporting our null hypothesis.

**III. CONCLUSION**

conclusions tell us that Before covid-19 majority of nursing studnets are highly emotionally intelligent while the. Similarly, almost majoprity of respondents were highly efficient. After covid-19 more than 65% respondents are highly emotionally intelligent while almost 77% respondents were highly efficient and the only 10% respondents were low efficient. The change in

the numbers clearly showed the impact of Covid 19 on the relationship between emotional intelligence and efficiency among nursing students. For testing purpose, we have used t test which turns out in the form of the rejection of our null hypothesis and we have concluded that there is an impact of covid-19 on the relationship between emotional intelligence and efficiency among nursing students.

## REFERENCES

- [1]. Extremera, N., and Fernández-Berrocal, P. (2006). Emotional intelligence as predictor of mental, social, and physical health in university students. *Span. J. Psychol.* 9, 45–51. doi: 10.1017/S1138741600005965
- [2]. Fernández-Berrocal, P., Extremera, N., and Ramos, N. (2004). Validity and reliability of the Spanish modified version of the trait meta-mood scale. *Psychol. Rep.* 94, 751–755. doi: 10.2466/pr0.94.3.751-755
- [3]. Persich, M. R., Smith, R., Cloonan, S. A., Woods-Lubbert, R., Strong, M., and Killgore, W. D. S. (2021). Emotional intelligence training as a protective factor for mental health during the COVID-19 pandemic. *Depress. Anxiety* 38, 1018–1025. doi: 10.1002/da.232028
- [4]. Plakhotnik, M. S., Volkova, N. V., Jiang, C., Yahiaoui, D., Pfeiffer, G., McKay, K., et al. (2021). The perceived impact of COVID-19 on student well-being and the mediating role of the university support: evidence from France, Germany, Russia, and the UK. *Front. Psychol.* 12:642689. doi: 10.3389/fpsyg.2021.642689
- [5]. Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *J. Pers. Soc. Psychol.* 57:1069.
- [6]. Son, C., Hegde, S., Smith, A., Wang, X., and Sasangohar, F. (2020). Effects of COVID-19 on college students' mental health in the United States: interview survey study. *J. Med. Internet Res.* 22:e21279. doi: 10.2196/21279
- [7]. Sturgill, R., Martinasek, M., Schmidt, T., and Goyal, R. (2021). A novel artificial intelligence-powered emotional intelligence and mindfulness App (Ajivar) for the college student population during the COVID-19 pandemic: quantitative questionnaire study. *JMIR Format. Res.* 5:e25372. doi: 10.2196/25372
- [8]. Talsma, K., Robertson, K., Thomas, C., and Norris, K. (2021). COVID-19 beliefs, self-efficacy and academic performance in first-year university students: cohort comparison and mediation analysis. *Front. Psychol.* 12:643408. doi: 10.3389/fpsyg.2021.643408



- [9]. Tan, Y., Huang, C., Geng, Y., Cheung, S. P., and Zhang, S. (2021). Psychological well-being in Chinese college students during the COVID-19 pandemic: roles of resilience and environmental stress. *Front. Psychol.* 12:671553. doi: 10.3389/fpsyg.2021.671553.
- [10]. Bada B. V., Salaudeen K. K., Alli M. K., Oyekola A. O. (2020). Effect of emotional stability and self-efficacy on psychological well-being of emerging adults during COVID-19 in Nigeria. *Eur. J. Educ. Stud.* 7 776–786. 10.46827/ejes.v7i11.3508
- [11]. Bandura A. (1982). Self-efficacy mechanism in human agency. *Am. Psychol.* 37 122–147. 10.1037/0003-066X.37.2.122
- [12]. Bartos L. J., Funes M. J., Ouellet M., Posadas M. P., Krägeloh C. (2021). Developing resilience during the COVID-19 pandemic: yoga and mindfulness for the well-being of student musicians in Spain. *Front. Psychol.* 12:642992. 10.3389/fpsyg.2021.642992
- [13]. Berman A. H., Bendtsen M., Molander O., Lindfors P., Lindner P., Granlund L., et al. (2021). Compliance with recommendations limiting COVID-19 contagion among university students in Sweden: associations with self-reported symptoms, mental health and academic self-efficacy. *Scand. J. Public Health* 2021:14034948211027824. 10.1177/14034948211027824.
- [14]. Hobfoll S. E. (1989). Conservation of resources: a new attempt at conceptualizing stress. *Am. Psychol.* 44 513–524.
- [15]. Hussien R. M., Elkayal M. M., Shahin M. A. H. (2020). Emotional intelligence and uncertainty among undergraduate nursing students during the COVID-19 pandemic outbreak: a comparative study. *Open Nurs. J.* 14 220–231. 10.2174/1874434602014010220
- [16]. Ihm L., Zhang H., van Vijfeijken A., Waugh M. G. (2021). Impacts of the COVID-19 pandemic on the health of university students. *Intern. J. Health Plan. Manag.* 36 618–627. 10.1002/hpm.3145
- [17]. Iqbal J., Qureshi N., Ashraf M. A., Rasool S. F., Asghar M. Z. (2021). The effect of emotional intelligence and academic social networking sites on academic performance during the COVID-19 pandemic. *Psychol. Res. Behav. Manag.* 14 905–920.
- [18]. Kohls E., Baldofski S., Moeller R., Klemm S.-L., Rummel-Kluge C. (2021). Mental health, social and emotional well-being, and perceived burdens of university students during COVID-19 pandemic lockdown in Germany. *Front. Psychiatry* 12:643957. 10.3389/fpsyg.2021.643957