COMPARATIVE STUDY OF STEM AND NON- STEM STUDENTS ON NARCISSISM AND EMOTIONAL INTELLIGENCE

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ABSTRACT

Narcissism and Emotional Intelligence have been linked with each other in the context of performance. The present study investigated variations on narcissism and EI scores between Liberal Arts and math students. The data was collected from 80 male participants aged 18-30 years. The tools used for the purpose described above were the Narcissism Personality Inventory (NPI) and Trait Emotional Intelligence Questionnaire – Short Form (TEIQue-SF). An Independent T-test was computed to calculate the results for the obtained data. The results revealed that students from the math students group exhibited higher scores on superiority and well-being than those from liberal arts students.

Keywords: Narcissism; Emotional Intelligence; EI; Liberal Arts; Math students.

INTRODUCTION

1.1 Narcissism

Narcissism is defined as excessive self-involvement to the point that a person ignores the needs of those around them. While everyone exhibits narcissistic behaviour from time to time, real narcissists routinely neglect people or their feelings. They are also unaware of the impact their behaviour has on others. Because narcissism is a spectrum condition, not every narcissist has narcissistic personality disorder (NPD).

People who are at the top end of the range are classed as having NPD, whereas others with narcissistic features may be at the lower end of the scale. Narcissists are often charming and captivating. They frequently do not exhibit negative behaviour right away, especially in relationships. Narcissists frequently surround themselves with people who feed their egos. They form relationships to reaffirm their self-perception, even if these interactions are shallow.

According to some psychologists, a modest level of narcissism is beneficial to psychological wellness. Narcissism and psychological wellness are mediated by self-esteem. As a result of their enhanced self-esteem stemming from self-perceptions of competence and likability, high narcissists are relatively free of anxiety and depression.

Extremely high levels of narcissistic behaviour are deemed pathological. The pathological form of narcissism is a magnified, severe manifestation of healthy narcissism. It manifests as an inability to love others, a lack of empathy, emptiness, boredom, and an unending desire for power, making the person unavailable to others.

Kernberg, Kohut, and Theodore Millon, clinical theorists, all recognised pathological narcissism as a possible result of unempathic and inconsistent early childhood interactions. They proposed that narcissists try to compensate in adult relationships. Karen Horney (1885-1952), a German psychoanalyst, saw the narcissistic personality as a temperament trait

shaped by a specific type of early environment.

1.2 Emotional Intelligence

The earliest psychological theory of emotional intelligence was developed by Peter Salovey and [1] and introduced as a *"set of skills hypothesized to contribute to the accurate appraisal and expression of emotion in oneself and others, the effective regulation of emotion in self and others, and the use of feelings to motivate, plan, and achieve in one's life."* Emotional intelligence is also defined as combining intelligence, empathy, and emotions to improve thought and knowledge of interpersonal dynamics. There are three main models of EI: ability model, mixed model and trait model.

[1] define EI within the parameters of the conventional criteria for a new intelligence in the ability model. According to the ability-based model, emotions are useful sources of information that aid in making sense of and navigating the social environment. According to the model, individuals differ in their ability to handle emotional information and relate emotional processing to broader cognition. This model includes four abilities: perceiving, using, understanding and managing emotions. Ability model EI can be measured by Mayer-Salovey- Caruso Emotional Intelligence Test (MSCEIT), Diagnostic Analysis of Non-verbal Accuracy (DANVA), Japanese and Caucasian Brief Affect Recognition Test (JACBART), Situational Test of Emotional Understanding (STEU) and Situational Test of Emotion Management (STEM).

[2] introduced a mixed model which focuses on EI as a diverse set of competencies and skills that drive leadership performance. He gave five main EI components: self-awareness, self-regulation, social skills, empathy and motivation. There are two measurement tools based on the Goleman model. First, the Emotional Competence Inventory (ECI) and the Emotional and Social Competence Inventory (ESCI) are newer versions of ECI. Secondly, the Emotional Intelligence Appraisal.

[3] established a conceptual contrast between an ability-based model and a trait-based model of EI in various articles spanning many years. EI is a trait that refers to "a constellation of emotional self-perceptions located at the lower levels of personality." Trait EI refers to an individual's self-perceptions of emotional talents in layman's terms. There are many self-report measures of EI which include: the Swinburne University Emotional Intelligence Test (SUEIT), the Schutte EI model, BarOn EQ-I and The Trait Emotional Intelligence Questionnaire (TEIQue).

The constructs of emotional intelligence will be examined in this study, including well-being, self-control, emotionality and sociability.

1.3 ROLE OF NARCISSIM AND EMOTIONAL INTELLIGENCE IN ACADEMICS

Students with high narcissism are known to react poorly to criticism [4], exhibit signs of academic entitlement [5], and—as measured by the Narcissistic Personality Inventory [6]—maintain their positive self-concepts of academic ability when surrounded by others outperforming them [7]. It was also discovered that both significant indirect and significant direct impacts of grandiose narcissism on academic achievement, demonstrating that the characteristic has both good and negative repercussions. Academic performance benefits from strong confidence and reduced anxiety in those with grandiose narcissism. These attributes are associated with advantages; for example, high confidence promotes motivation to engage in goal-related behaviour [8].

Emotional intelligence is the ability to recognise our own feelings as well as those of others,

to motivate ourselves, and to manage emotions effectively in ourselves and in our relationships. [2] discovered through his studies that emotional intelligence is extremely advantageous in education, work, and mental health. He proposed and provided study evidence that being high in emotional intelligence is more significant than being good in intellectual talents regarding long-term performance and success in various life scenarios. It is stated that we can educate and enhance several critical emotional competencies in youngsters. Emotionally intelligent persons are more likely to succeed in all endeavours. Teaching emotional and social skills in school is critical; it can improve academic achievement in the year they are taught and subsequent years. Teaching these abilities has a long-term impact on academic attainment. In short, emotionally intelligent students perform better academically, and EI has the potential to boost academic performance.

2. REVIEW OF LITERATURE

Based on the literature review, various Research Scholars have previously explored the variables under consideration in this research study to varying degrees. Here are several examples:-

A research study conducted by [9] seeks to expand on earlier findings on EI in narcissists by taking into account maladaptive components of EI, such as emotional manipulation, and distinguishing between grandiose and vulnerable narcissism. Examining the relationship between both types of narcissism and both the positive and negative characteristics of EI allows them to present more evidence that narcissism is a complex phenomenon. It was regulated with a convenience sample of 584 undergraduates from the University of Florence (Italy). The results show that both grandiose and vulnerable narcissists are susceptible to emotionally manipulating others to achieve their goals.

Marcin Zajenkowski et al. conducted a study in 2018 where they aimed to study the association between these types of narcissism and various conceptions of EI. It involved 249 volunteer participants (174 female, 75 male) recruited via publicly accessible social networking websites. They discovered that vulnerable narcissism was significantly and negatively related to trait (self-reported) EI but not to ability (performance) EI. Grandiose narcissism was found to be significantly associated with trait EI. Furthermore, when the two EI scores were combined in a single model, they were linked to grandiose narcissism in opposite directions. Trait EI was found to

be positively related to grandiose narcissism, but ability EI was found to be adversely related to this type of narcissism. The latter findings are consistent with earlier research indicating that people with a high level of grandiose narcissism tend to overestimate their talents. Vulnerable narcissism is most likely associated with a more realistic self-perception of one's emotional capacities.

A research study conducted by [10] seeks to compare creativity, emotional intelligence, and narcissism in medical practitioners and educators aged 28-65 years. The aforementioned characteristics were measured using Kaufman's Domains of Creativity, Schutte's Emotional Intelligence, and the Narcissistic Personality Inventory. The results findings are Emotional intelligence and narcissism in medical practitioners were shown to be strongly associated.

At the same time, creativity in educators was found to be positively correlated with emotional intelligence and narcissism.

3. OBJECTIVES AND HYPOTHESES

3.1 Objectives

1. To study variations in narcissism scores between Liberal Arts and math students

2. To study variations in EI scores between Liberal Arts and math students

3.2 Hypotheses

H_1 – No difference between Liberal Arts and math students in Narcissism score H_2 – No difference between Liberal Arts and math students in EI score

4. METHODOLOGY

4.1 Sample

The total sample size for the study was 80 students- 40 liberal arts and 40 math students male participants were required of the age group 18-30 years. The sample was collected via offline mode using purposive sampling and taken from students of colleges in Ludhiana.

4.2 Design:

A between-subject design was used for collecting data. The independent variables are academic groups. The dependent variables are narcissism and emotional intelligence.

4.3 Tools used

As per the objective of the investigation, two measures were used to assess narcissism and emotional intelligence. The following tools were used for the study: -

1. Narcissistic Personality Inventory (NPI)

The tool was created by [11]. It is a 16-item, five-point Likert scale. Eight items were scored negatively, and eight items were scored positively. The participants are required to respond by carefully reading statements and rate how frequently they feel or act in the manner described from the 5-point Likert Scale: 0(never), 1(rarely), 2(sometimes), 3(often), 4(always). The obtained reliability for this scale is .65 from 16 items.

2. Trait Emotional Intelligence Questionnaire – Short Form (TEIQue-SF).

The scale was developed by [12] a 30-item questionnaire that measures global trait emotional intelligence (Trait EI). It is based on the complete form of TEIQue. Two items from each of TEIQue's 15 facets were chosen for inclusion based chiefly on their relationships with the associated total facet scores. The participants must respond by drawing a circle around the number that best indicates their agreement or disagreement with the statement. Each sentence has seven different responses, ranging from 'Completely Disagree' (number 1) to 'Completely Agree' (number 7). The obtained reliability for this scale is .84 from 30 items.

4.4 Statistical Analyses

4.5 Statistical Package for Social Science (SPSS) version 20.1 and Microsoft Excel were used to analyses the data. An Independent T-test was performed to calculate the results of the obtained data.

4.5 Procedure

The data for the study was collected through the means of offline mode using purposive sampling. The first section of the form consisted of ethical guidelines. Participants were assured of privacy and confidentiality of their responses. Once the participants consented to participate in the study, they were asked to fill out the form. The following two sections of

the questionnaire included the two tools; NPI 40 and TEIQue-SF. Interpretation was done for the results. Individual results of narcissism and emotional intelligence were also sent to the participants.

5. RESULTS

To meet the objective of the study, statistical analyses were used to compute the values. Reliability, Independent sample reliability and independent sample T-test were calculated. The tables below show the calculated reliability of scales and independent t-test for the variable study.

Table 1

Calculated Reliability for narcissism personality inventory (NPI)

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.828	.826	40

Table 1 shows Cronbach alpha obtained from our results is .82 from 40 items. As compared to the reliability scores constructed from the original scales were .83, .74, .80 and .90.

Table 2

Calculated Reliability for trait emotional intelligence questionnaire- short form (TEIQue-SF)

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.848	.850	30

Table 2 shows Cronbach alpha obtained from our results is .84 from 30 items.

Table 3

Mean comparison of math students and liberal arts on narcissism and emotional intelligence

	Math Students		Liberal Arts				
Variables	Mean	SD	Mean	SD	t(78)	p	Cohen's d
NPI Total	17.00	6.49	16.18	5.86	0.59	.55	0.13
Authority	3.98	2.04	4.43	2.13	-0.96	.33	0.21
Self Sufficiency	2.98	1.56	3.03	1.00	-0.17	.86	0.62
Superiority	2.53	1.37	1.63	1.27	3.03	.003	0.67
Exhibitionism	2.08	1.49	1.75	1.53	0.96	.33	0.21
Exploitativeness	1.70	1.63	1.60	1.15	0.31	.75	0.07
Vanity	1.25	0.95	1.28	1.01	-0.11	.91	0.03
Entitlement	2.50	1.03	2.48	1.26	0.09	.92	0.01
EQ Total	4.87	0.76	4.66	0.65	1.32	.19	0.29
Well Being	5.30	0.90	4.78	1.07	2.34	.022	0.52
Self Control	4.58	0.83	4.46	1.04	0.57	.56	0.12
Emotionality	4.75	0.92	4.57	1.02	0.81	.41	0.18
Sociability	4.60	0.96	4.64	0.90	-0.21	.82	0.04

Table 3 revealed significant mean differences in superiority with $t(78)= 3.03$, $p < .05$ and well-being $t(78)= 2.34$, $p < .05$. Findings showed that students from math groups exhibited higher scores on superiority (Mean=2.53, SD=1.37) compared to those students from liberal arts students (Mean= 1.63, SD 1.27). The value of Cohen's d for superiority was 0.67 (>0.5), which indicated a large difference in effect size. Students from liberal arts exhibited lower scores on well-being (Mean=4.78, SD=1.07) compared to math students (Mean=5.30, SD=0.90). The value of Cohen's d for well-being was 0.52, which indicated a moderate effect size.

6. DISCUSSION

The study's first objective was to investigate variations in narcissism scores between Liberal Arts and math students. It was hypothesised that there would be no difference between Liberal Arts and math students in Narcissism scores. The results revealed that it was partially accepted.

A study conducted by [13] aimed to investigate the current study, which sought to clarify the NPI's factor structure and highlight its nomological network. Four investigations supported a three-factor model with the dimensions of Leadership/Authority, Grandiose Exhibitionism, and Entitlement/Exploitativeness. Leadership/Authority was often associated with adaptive outcomes, but the other two variables, particularly Entitlement/Exploitativeness, were associated with maladaptive outcomes. Participants included 19,001 college students, and data was collected from a large university in northern California. The results showed that The NPI Leadership/Authority scale was found to be negatively associated with PNI (Pathological Narcissism Inventory) Contingent Self-Esteem, indicating that people with greater levels of Leadership/Authority have a lower tendency to perceive their self-esteem as variable and dependent on external factors.

The study's second objective was to investigate variations in EI scores between Liberal Arts and math students. It was hypothesised that there would be no difference between Liberal Arts and math students in EI scores. The results were partially accepted.

Researchers such as[14] have emphasised the importance of social behaviour and interpersonal interactions. Happy individuals tend to be more socially involved than others, and correlations between happiness and organisational civic behaviour are common (see above).

Furthermore, a comparison of Asian American and Asian international students revealed that ethnic identity predicted Asian American students' emotional well-being rather than acculturation. In contrast, neither ethnic identity nor acculturation predicted Asian international students' emotional well-being [15]. Participating in a club on or off campus or making friends on or off campus has also been proven to boost the typical student's level of general well-being[16]. However, identity loss has lowered well-being [17].

7. CONCLUSION, IMPLICATION AND LIMITATIONS

7.1 Conclusion

The present study was conducted to know the effect of narcissism and emotional intelligence in academic groups (math students and Liberal Arts) in the age group of 18- 30 years. Based on this study, the results revealed that students from the math students group exhibited higher scores on superiority and well-being than those from liberal arts students.

7.2 Implication

The results suggest superiority and well-being are higher in math students than in liberal arts

students. There exists a paucity of studies in these academic disciplines. Research has yet to be done on these academic disciplines using narcissism and emotional intelligence as their variables. As this study is done on students in India, the research can be used for future studies.

7.3 Limitations and Future Scope

This study contained a few limitations. A larger sample size could suffice for more generalizability of the findings. Having a larger sample size will bring forth more behaviours characteristic of narcissists and emotional intelligence, which leads to more robust results. Reliance on self-report measures introduces the potential for social desirability bias, where participants may respond in a way they perceive as socially acceptable rather than providing accurate information.

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