Relationship between Emotional Intelligence and Anxiety among Young Adults

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ABSTRACT

Anxiety is not a new term in the academic and social environment for young adults. From examination anxiety to adjustment problems at higher school, university, and workplace, anxiety has many adverse effects on young adult performance and mental health. Emotional intelligence provides us the ability to deal effectively with mental abnormality and anxiety in a different environment. At the university level, there were young adults of different social, cultural, and economic strata, so the university or workplace environment has a different impact on their level of affiliation and interaction. The present study aims to find out the relationship between these two constructs among young adults. Emotional intelligence level measured by the Kumar, A. I Narain, S. Emotional Intelligence Scale EIS-SANS, National Psychological Corporation (2014). The construct of anxiety level is measured by the Hamilton M. The assessment of anxiety states by rating. Br J Med Psychol 1959; 32:50–55. Two hundred and fourteen ($n = 214$) young adults from different parts of India constitute the sample of this study out of 214 respondents, 127 *male*s and 87 *female*s respondents between the age range of 20 and 40 *year*s. The collected data were analyzed ANOVA and correlation through SPSS (Version 26). The results revealed that there is a fragile association between emotional intelligence level and level of anxiety; results revealed that there is a negative correlation between emotional intelligence and anxiety ($r = -0.061$, $P < 0.05$). The findings of this study have established that there is a significant difference between emotional intelligence and anxiety across gender of young adults, and male respondents had a better emotional intelligence which helps them to cope up with anxiety, female respondents, slightly behind in such conditions

Keywords: Anxiety, Emotional intelligence, Gender, Limbic system, Orbitofrontal cortex, Young adults

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INTRODUCTION

Emotional intelligence is important in both personal and professional life. The purpose of this study was to see if there was a link between young adults level of Emotional Intelligence and their Anxiety. A total of 214 young adults from various parts of the country were chosen as a sample, and all studies done in details.

Emotional Intelligence

Everyone has a different temperament, different demands, commitments, and different ways of expressing their emotions. If we want to achieve success in life, we need to handle our emotions carefully, and all that takes are cleverness. We need to understand our emotions to form a sound and robust relationship, achieve tremendous success at the professional level, and live a healthy and happy life. This is where emotional intelligence comes into play in our daily lives. The word emotional intelligence was coined by two scientists, Peter Salvoy and John Mayer, in 1990. Emotional intelligence is a cognitive and psychological state of mind associated with the ability to understand, govern, and evaluate our own and other people's emotions. Researchers claim that emotional intelligence can be fixed and learned, while few researchers claim that it is a genetic characteristic. We measure emotional intelligence, like intelligence quotient, with the help of a tool known as the emotional quotient. Emotional intelligence is an essential tool to communicate productively, empathize with others, defeat challenges, and defuse conflict. Emotional intelligence impacts various aspects of our everyday life, such as how we behave and the way we connect with others (Mayer *et al*., 1997).[1]

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Emotional Intelligence Components

There are several versions of emotional intelligence, each with its own set of talents; in popular parlance, they are often referred to as "EQ." We prefer the term "EI," which we define as four domains: Self-awareness, Self-management, Social Awareness, and Relationship Management (Figure 1) Component of emotional intelligence.

Self-awareness

Self-awareness is understanding our moods and emotions, understanding our weaknesses and strengths, motivation factors, and how and why we respond to situations in a particular way.

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                    Emotional intelligence has
                          four components

  Self-awareness    Self-management    Social Awareness    Relationship
                                                            Management
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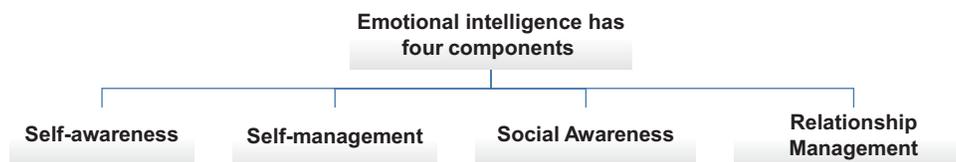
Figure1: Component of emotional intelligence

Self-awareness lies at the heart of the emotional intelligence model and, to a great extent, influences our ability to develop other competencies. It enables us to sustain our behavior over time, despite setbacks (Carmeli *et al*., 2006).[2]

Self-management

It is thinking before act! Its state of mind which help us to how effectively we control our emotion and how well we manage our response to unfamiliar situations. It can keep impulsive feelings and emotions under control (Carmeli *et al*., 2006).[2]

Social awareness

States of mind that concern our ability to listen and understand other feelings, thoughts, and concerns, whether verbally or non-verbally. Social awareness is all about how we deal with the emotion of other people in our surroundings, even unspoken or partially expressed (Carmeli *et al*., 2006).[2]

Relationship management

We can apply emotional understanding in our dealings with others. This is when our emotional intelligence shines brightest for the people we work with (putting EI to work). It includes the ability to develop relationships, build trust. It is the culmination of the other three dimensions of emotional intelligence (Carmeli *et al*., 2006).[2]

Importance of Emotional Intelligence

Positive and high emotional intelligence helps us maintain our mental health because it reduces anxiety, depression, and mood swings and enhances our cognitive performance and physical performance. Emotional intelligence helps us navigate the social challenges of the professional place, lead and motivate others, and excel in our professional life. By understanding our emotions and how to control them positively, we can better express how we feel and understand how others are feeling. This allows us to communicate more effectively and buildup stronger relationships, both in personal and professional life (Barbuto *et al*., 2006).[3]

Neurosciences of Emotional Intelligence

Limbic system is a complex set of neuroanatomical structures present on both sides of the thalamus just within the cerebrum. Its structure plays an essential role in processing our emotions as well as memory formation. The Limbic system Region of brain involves in emotional intelligence processing (Figure 2). The emerging field of neuroscience has revealed that various emotion-related brain regions may correlate with emotional intelligence, such as the amygdala, anterior insula, anterior
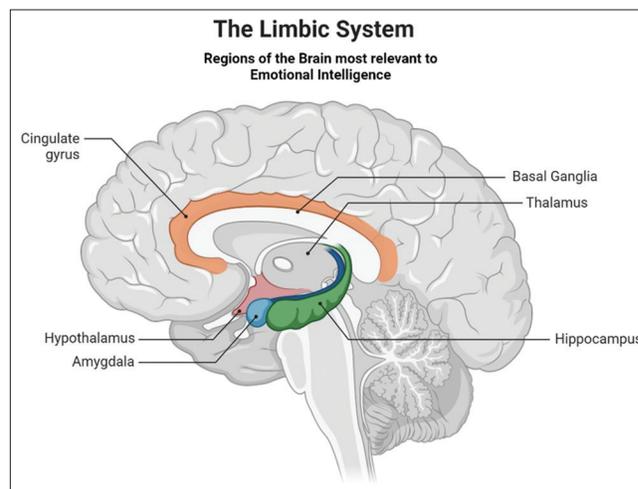
Figure 2: The Limbic system Region of brain involves in emotional intelligence processing, created by biorender.com

cingulate cortex orbitofrontal cortex, and ventromedial prefrontal cortex (Panksepp *et al*., 2003).[4]

A recent study of the neuroanatomical basis of emotional intelligence confirmed that emotional intelligence is positively related to the regional gray matter volume in the right orbitofrontal cortex, which is regarded as a critical region of emotional processing (He *et al*., 2018).[5]

Anxiety

It is a severe and common mental illness. Anxiety is an emotion characterized by feelings of tension, worried thoughts, and physical changes like increased blood pressure. People with anxiety disorders usually have recurring intrusive thoughts or concerns. They may avoid certain situations because they are concerned. Anxiety differs from other normal feelings of nervousness and involves excessive fear. Anxiety also refers to the anticipation of a future concern and is associated more with muscle tension and avoidance behavior. This problem can cause people to avoid situations and places that might cause them to feel trapped, panic, embarrassed, helpless, and scared. Professional, academic, and personal relationships can be affected. Anxiety disorder is the most common mental disorder affecting a majority of the population. For people who have it, worry and fear are constant and overwhelming. The exact etiology of anxiety disorders is still unknown and mysterious for the researcher. It may be inherited or acquired: One can trace its origins to the parents, which means the individual possibly inherits the genes. Repetitive past life experience situations from which the individual has gained an unpleasant life experience that becomes fixed in his or her mind, making him anticipate the worst: A horrible and traumatic life experience that may lead to specific fears or phobias. Some of the environmental factors

that also play a role in the etiology of anxiety are social conflict, brain injury, loss of ideology, inadequate coping mechanisms, dysfunctional thoughts, beliefs, and cognitive processing. Physical signs and symptoms are as follows: Trembling of the body, dilated pupil, restlessness and muscle twitches, palpitations, dizziness, increased heart rate, flushing, excessive sweating, rapid breathing, diarrhea, and dry mouth. Cognitive symptoms may include: Facial expressions are fear, depersonalization, easy distractibility, poor concentration, lack of sleep, inability to relax, fearfulness, and irritability. Diagnosis and management: The physician or psychiatry diagnosed anxiety disorder from the history, physical examination, and mental examination findings help to rule out any apparent medical condition associated with anxiety. Management of anxiety depends on anxiety symptoms, but commonly psychiatry prescribed psychopharmacological drugs with a different type of behavior therapy like cognitive behavior therapy (Trivedi *et al.*, 2010).[6]

Young Adult

Young adult is a period of adjustment to the new pattern of life. A young adult is generally a person ranging in age from their late teens or early twenties to their thirties, although definitions and opinions, such as Erik Erikson's stages of human development, vary. The young adult stage in human development precedes middle adulthood. According to Erikson's stages of human development, a young adult, also called a prime adult, is generally a person in the age range of 20–40. Mental abnormality is a common issue faced by this age group (Nupur and Agarwal, 2013).[7]

The objectives of the current study include examining to assess and compare emotional intelligence of young adults across gender, assess the level of anxiety among young adults across gender, and examine the relationship between emotional intelligence and anxiety among young adults.

Following are the hypothesis of the current study:

$H0_1$: There exists no significant difference between emotional intelligence across gender.

$H0_2$: There exists no significant difference between levels of anxiety across gender.

$H0_3$: There exists no relationship between levels of anxiety level and emotional intelligence level.

Methodology

Sample

A sample of 214 young adults ($n = 214$), 127 males and 87 females between the age range of 20 and 40 years from various parts of India, was taken for the study based on the exclusion and inclusion criteria of the study. Snowball sampling technique was used to select the sample selected through the online and offline methods. Snowball sampling is where research participants recruit other participants for a test or study.

Research Design

A research design is prepared for compiling and analyzing new data for interpreting the already available facts in a new form. Preparation for a research design involves making proper arrangements for simple systematic research work. The researcher plans the various operations, keeping the theoretical framework, and the required resources in mind (Singh, 2001).[8]

In the present study, a descriptive research design was chosen. It was chosen as we were observing and describing the relationship between anxiety and emotional intelligence among young adults subject. The subject was being observed in a completely natural and unchanged natural environment. This helped us gain insights on the demographic profile, academic, and all types of anxiety and emotional intelligence of the young adults without influencing their behavior in any way.

Tools used for the Study

- A self-structured demographic profile shall be used to study the demographic profile of young adults to collect general and specific information about the respondents
- Emotional intelligence level measured by the Kumar, A. and Narain, S. Emotional Intelligence Scale EIS-SANS, National Psychological Corporation (2014)
- Anxiety level measured by the Hamilton M. The assessment of anxiety states by rating. Br J Med Psychol 1959; 32:50–55

Reliability and Validity

The test-retest reliability was calculated by administering the test on the same sample ($n = 100$) with a fortnight gap. It was found to be 0.86 alpha coefficients, which was significant at the 0.01 level. The present scale was correlated against the emotional intelligence scale developed by Hyde, Pethe, and Dhar (2001). The concurrent validity was found to be 0.86, which was significant at the 0.01 level. For this purpose, both scales had been administered on the same sample ($n = 100$).

The Hamilton anxiety rating scale (HAM-A) was one of the first rating scales to be created to assess the severity of anxiety symptoms, and it is still widely used in clinical and research contexts today. The scale consists of 14 items, each characterized by a set of symptoms, and assesses both psychic and somatic anxieties. Although the HAM-A is still extensively used as a clinical trial outcome measure, it has been challenged for its inability to distinguish between anxiolytic and antidepressant effects, as well as somatic anxiety and somatic side effects. There are no standardized probe questions in the HAM-A. Despite this, the scale's indicated levels of interrater reliability appear to be acceptable.

Procedure

The interview schedule was protested on 15 respondents for validity. This study helped assess the calculated information. The data were collected through an in-depth interview to elicit the required information from the respondents. The sample was identified, and permission was sought from them to conduct the study. Efforts were made to maintain the accuracy, precision, and relevance of the answers. The data were then coded, scored, tabulated, and analyzed using relevant statistical procedures.

Data Analysis

The data were tabulated, coded, and decoded. Descriptive and relational statistical tools were used to analyze the data to

study the relationship between dependent and independent variables. Google Forms, Google Sheet, MS Excel (Version 2013), and SPSS (Version 26) were used to analyze descriptive and relational statistics. The data analysis was done using descriptive statistics in terms of frequency, percentage, and relational statistics applied correlation coefficient. Descriptive (frequency and percentage) and relational statistics (ANOVA) were used to analyze the data. One-way ANOVA was applied. The significance level was $P < 0.05$. The correlation was calculated using SPSS.

RESULTS

Distribution of Respondents Based on their Gender

The general profile of respondents was collected using a pre-designed interview schedule. Data collected were presented in the form of descriptive statistics, that is, frequency and percentage. Results show that the majority of the respondents (59.3%) are male, and the rest of the respondents (40.7%) are female.

Distribution of Respondents Based on the Emotional Intelligence Level

Information of respondents regarding gender and emotional intelligence level collected using pre-design interview schedule. Data collected were presented in the form of descriptive statistics, that is, frequency and percentage.

Table 1 describes the distribution of respondents based on the types of emotional intelligence level respondents. In male respondents, 27.5% of males had low emotional intelligence levels, 49.6% of males had average emotional intelligence levels, and 22.9% of males had high emotional intelligence levels. In female respondents, most females had low emotional intelligence levels (42.5%), 41.3% of female average emotional intelligence, and 11.2% of female respondents had high emotional intelligence levels.

$H0_1$: There exists no significant difference between levels of emotional intelligence across gender.

Table 2 result depicted that as $P < 0.05$, thus null hypothesis was rejected, means a significant difference between the level of emotional intelligence and gender of respondents (male and female). Mean value also depicts the same.

Distribution of Respondents on the Basis of the Anxiety Level

Information of respondents regarding gender and anxiety level collected using predesign interview schedule. Data collected were presented in the form of descriptive statistics, that is, frequency and percentage.

Table 3 describes the distribution of respondents based on the types of anxiety level respondents had. In the male gender, 79.5% of males had mild severity, 11.1% of males had mild-to-moderate severity, and 9.4% had moderate to high severity. In the case of female respondents, most females had mild severity (64.3%), 18.5% of female had mild-to-moderate severity, and 17.2% of female respondents had moderate-to-mild severity.

$H0_2$: There exists no significant difference between levels of anxiety across gender.

Table 1: Distribution of respondents on the basis of the emotional intelligence level ($n = 214$)

Gender	Frequency	Low EI	Average EI	High EI
Male	127	35 (27.5%)	63 (49.6%)	29 (22.9%)
Female	87	37 (42.5%)	36 (41.3%)	14 (11.2%)

Table 2: ANOVA value between level of emotional intelligence and gender of respondents

Categories (emotional intelligence level/gender)	Mean	df	f	Sig.	Conclusion
Male	1.95	212	4.750	0.030	S
Female	1.73				

Table 3: Distribution of respondents on the basis of the anxiety level ($n = 214$)

Gender	Total frequency	Mild severity	Mild-to-moderate severity	Moderate-to-severe severity
Male	127	101 (79.5%)	14 (11.1%)	12 (9.4%)
Female	87	56 (64.3%)	16 (18.5%)	15 (17.2%)

Table 4: ANOVA value between level of anxiety and gender of respondents

Categories (anxiety level/gender)	Mean	df	f	Sig.	Conclusion
Male	1.29	212	5.636	0.018	S
Female	1.58				

Table 5: Correlation on the basis of association between emotional intelligence level and level of anxiety

Categories	r	Sig.	Conclusions
Emotional intelligence level Level of anxiety	−0.061	0.373	S

The result in Table 4 depicted that as $P < 0.05$, thus the null hypothesis was rejected, means that there is a significant difference between levels of anxiety in males and females. Mean value also depicts the same.

$H0_3$: There exists no relationship between emotional intelligence level and level of anxiety.

The result in Table 5 depicted that $P > 0.05$, thus the null hypothesis is accepted, means that there is a thin association between emotional intelligence level and level of anxiety among young adults. The results revealed a negative correlation between emotional intelligence and anxiety ($r = -0.061$, $P < 0.05$).

DISCUSSION

Key findings emerge from the results above, and the proposed hypothesis was analyzed using different statistical techniques to test the hypothesis. The main objective was to see if there is any difference in emotional intelligence level and anxiety level across gender and there is any correlation stands between the emotional intelligence level and anxiety level of respondents. The results indicated in Table 1 suggest that male respondents had a high

emotional intelligence level compared to female respondents because the table shows that high EI frequency was 22.9% in males while only 11.2% of females had high EI. Table 2 result depicted that as $P < 0.05$, thus null hypothesis was rejected, means a significant difference between the level of emotional intelligence and gender of respondents (male and female). Table 3 shows that 17.2% of females were suffering from moderate to severe severity of anxiety; when compared with male respondents, only 9.4% of males had moderate-to-severe severity of anxiety. Above tabular data shows there is a significant difference in anxiety across gender of young adults. The result in Table 4 depicted that as $P < 0.05$, thus the null hypothesis was rejected, means that there is a significant difference between levels of anxiety in males and females. The result in Table 5 depicted that $P > 0.05$, thus the null hypothesis is accepted, means that there is a fragile association between emotional intelligence level and level of anxiety. The results revealed a negative correlation between emotional intelligence and anxiety ($r = -0.061$, $P < 0.05$). The correlation coefficient suggests that there is a negative correlation established between the emotional intelligence and anxiety students. The findings reflect that those young adults who manage their emotions effectively are more miniature, vulnerable to anxiety situations well at university, college, and workplace get better adjusted to these kinds of environments. Those who are low on dimensions of emotional intelligence are more likely to get over negative emotions that ultimately lead them into severe anxiety and other mental unwell being situations. This finding is consistent with the previous studies that suggest that emotional intelligence is negatively correlated with anxiety.

Conclusion

The findings of this study have established that there is a significant difference between emotional intelligence and anxiety across gender of young adults. Furthermore, this gender difference was seen in the mean value of EI level and anxiety level collectively between males and females. Male respondents had a better emotion quotient which helps them cope with anxiety, female respondents, slightly behind in such a scenario. Finding also suggests a fragile association between emotional intelligence level and level of anxiety among young adults; the results revealed a negative correlation between emotional intelligence and anxiety ($r = -0.061$, $P < 0.05$) which means those young adults who manage their emotion effectively are less, vulnerable to anxiety situations well at university, college, and workplace get better

adjusted to these kinds of environments and those who are low on dimensions of emotional intelligence are more likely get over by negative emotions that ultimately lead them into severe anxiety and other mental disorder.

The previous study has suggested that females have higher emotional intelligence than males because they are better able to control and regulate their emotions and anxiety. However, my finding suggests that males have higher emotional intelligence than females because they are better able to control and regulate their emotions and anxiety. According to the findings, the intervention, a short-term intervention, could have provided an immediate and direct remedy for the young adults, resulting in a change in scores. The attachments we experience during childhood have a significant impact on our brain and self-image and how we grow up to associate with others. The level of gender differences in emotional intelligence and anxiety suggests that males might be influenced by the childhood patterns of socialization and freedom of expression.

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