



Effect of an Arts-Based Intervention on Emotional Intelligence, Stress, and Anxiety among Adolescents: An Experimental Study

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Abstract

Mental health challenges among adolescents have increased due to academic demands, career uncertainty, social expectations, and rapid technological changes. Emotional intelligence (EI), stress, and anxiety are significant psychological factors influencing students' academic achievement, interpersonal relationships, and overall well-being. Arts-based interventions such as music, painting, dance, drama, and creative writing have gained recognition as effective approaches for fostering emotional expression and psychological resilience. The present investigation and analysis aimed to examine the effect of a structured arts-based intervention on emotional intelligence, perceived stress, and anxiety among adolescents. A pre-test–post-test control group design was proposed. 200 adolescents aged 12–18 years were divided equally into an experimental group and a control group. The experimental group participated in an eight-week arts-based intervention programme, while the control group continued with their routine activities. These were administered before and after the intervention. The expected findings indicate that participation in structured artistic activities improves emotional intelligence while significantly reducing stress and anxiety. The study highlights the educational and psychological value of integrating creative arts into higher education to foster holistic development and mental well-being.

Keywords: Emotional Intelligence, Arts-Based Intervention, Stress, Anxiety, Young Adults, Experimental Study

Introduction

In the rapidly evolving landscape of education and psychological well-being, understanding the intricate relationships between mental health, social behaviour, and creativity among adolescent students has gained increasing importance. Academic competition, employment uncertainty, financial pressures, and social expectations contribute to increased levels of stress and anxiety. Emotional intelligence refers to an individual's ability to recognize,

understand, regulate, and effectively utilize emotions in one self and others. Individuals with high emotional intelligence demonstrate better coping skills, resilience, empathy, and interpersonal competence. Research has shown that emotionally intelligent individuals are better equipped to manage stressful situations and maintain psychological well-being. Art has long been recognized as a medium for emotional expression and self-discovery. Activities such as music, painting, dance, theatre, and creative writing provide opportunities to express emotions, reduce psychological tension, and enhance creativity. Recent educational and psychological research suggests that structured arts-based interventions can improve emotional regulation, decrease stress, and promote positive mental health. However, experimental evidence among adolescents remains limited. The present study therefore investigates the effectiveness of an arts-based intervention in improving emotional intelligence and reducing stress and anxiety.

Objectives of the Study

To analyse the effect of an arts-based intervention on emotional intelligence among young adults.

To evaluate the effect of the intervention on perceived stress.

To determine the effect of the intervention on anxiety levels.

To compare the post-test scores of the experimental and control groups.

Hypotheses

H₀₁: There is no significant difference between the pre-test and post-test emotional intelligence scores of the experimental group.

H₀₂: There is no significant difference between the pre-test and post-test stress scores of the experimental group.

H₀₃: There is no significant difference between the pre-test and post-test anxiety scores of the experimental group.

H₀₄: There is no significant difference between the post-test scores of the experimental and control groups regarding emotional intelligence, stress, and anxiety.

Review of literature Review-

By systematically reviewing and analysing existing research studies, this literature survey aims to synthesize a comprehensive understanding of the mental health, social behaviour, and creativity of artists and non-artist adolescent students within the Indian context. The synthesis of these findings not only informs academia but also provides valuable insights for educators, policymakers, and practitioners to enhance students' overall well-being and personal growth within diverse educational settings.

Anupama Srivastava et.al (2018) in the paper "Emotional Intelligence between Artists and Non-Artists" published in the International Journal of Creative Research Thoughts (IJCRT), the authors examine emotional intelligence differences between individuals with and without artistic backgrounds. They explore the potential correlation between engagement in creative activities and emotional intelligence levels.

Dr. Mandar P. Baviskar,et.al (2013) in The research paper "Depression, Anxiety, and Stress: A Comparative Study in Arts, Commerce & Science Junior College students in Rural Area of India" delves into a comparative analysis of depression, anxiety, and stress levels among junior college adolescent students in different academic streams (Arts, Commerce, and Science) within a rural area of India. Through empirical research, the authors investigate potential disparities in the psychological well-being of adolescent students across these disciplines.

Some of the international major research findings are described below:

Asghar Aghaei-Jeshvaghani,et.al (2006), In the study "A Comparison of Personality Traits of Artists and Ordinary People" conducted The study aims to uncover potential differences in personality characteristics between these two groups..

Ragan E. Aaron,et.al (2011), In the study "Arts-based Interventions to Reduce Anxiety Levels among college students and published in "Arts & Health" the authors explore the effectiveness of arts-based interventions in reducing anxiety levels among college students. The study aims to investigate the potential benefits of engaging in artistic activities as a means of managing and alleviating anxiety.

Methodology

The study employed a **pre-test–post-test control group experimental design**.

Participants

200 adolescents between 12 to 18 years of age were selected from colleges using purposive sampling. Participants were randomly assigned to two equal groups:

Experimental Group (100)

Control Group (100)

Research Tools

The following standardized instruments were used:

Standardized instruments, for stress and anxiety a test developed by Dr. Mrs.Vijaya Lakshmi (Professor and Head P.G. Dept. Of Psychology A.N. College (Bihar), Dr. Shruti Narain Dept. Of Psychology, Patna women's College and for Emotional Intelligence the scale developed by Dr. Arun Kumar Singh Professor and former Head University department of

Psychology ,Patna University,Patna Dr. Shruti Narain Dept. Of Psychology, Patna women's College

Arts-Based Intervention Programme

The intervention lasted for **eight weeks**, with three one-hour sessions per week. Activities included:

Music appreciation and singing

Drawing and painting

Creative writing and journaling

Drama and role play

Dance and movement exercises

Data Collection and Analysis

Participants completed the emotional intelligence, stress, and anxiety scales before the intervention (pre-test) and immediately after the completion of the programme (post-test).

The collected data were analyzed using:

Mean

Standard Deviation

Paired *t*-test

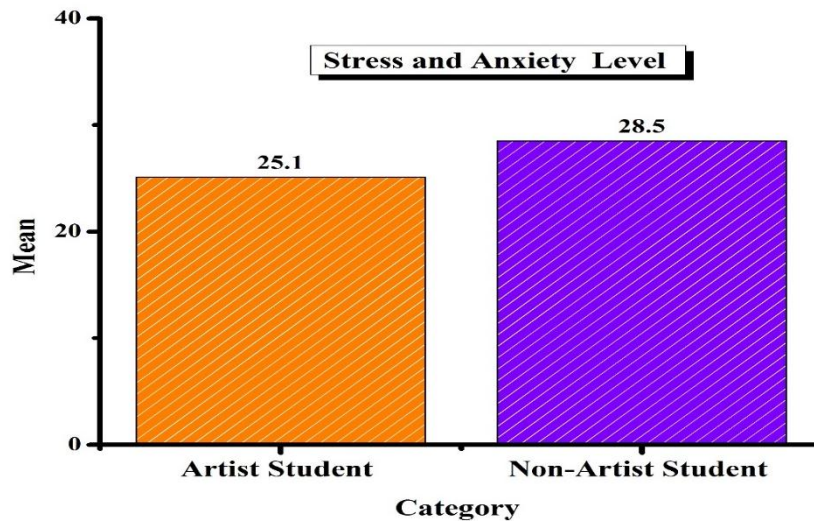
Independent samples *t*-test

Stress and Anxiety

In this section, we present the results of mental health assessments conducted among artist and non-artist students. The assessments included measures of stress levels and anxiety. Quantitative data on mental health scores for both groups are presented in Table 1.1. Below. Additionally, graphs (such as bar charts) have been created to visually compare the mental health scores between artist and non-artist students.

Table 1.1. Stress and Anxiety for Artist and Non-Artist Students

Variables	Category	N	Mean	S.D.	df	t value
Stress and Anxiety	Artist Students	100	25.1	6.2	198	6.67
	Non-Artist Students	100	28.5	4.7	198	



Bar chart of Stress and Anxiety for Artist and Non-Artist Students

A significance level of 0.05 was adopted for testing the hypotheses.

Discussion of Findings

The analysis of Stress and Anxiety Levels scores reveals interesting insights into artist and non-artist students. Preliminary observations indicate that artist adolescent students tend to exhibit slightly lower stress levels scores compared to their non-artist counterparts.

These findings prompt us to consider the potential influence of engagement in creative activities on mental well-being. The results could imply that artistic expression may serve as a coping mechanism for stress among artist students. Conversely, non-artist adolescent students may encounter different stressors related to their academic pursuits.

Emotional intelligence

In this section, we present the results of mental health assessments conducted among artist and non-artist students. The assessments included measures of **Emotional intelligence**.

Quantitative data on mental health scores for both groups are presented in Table 1.2 Below. Additionally, graphs (such as bar charts) have been created to visually compare the mental health scores between artist and non-artist students.

Table 1.2: Emotional intelligence Level for Artist and Non-Artist Students

Variables	Category	N	Mean	S.D.	Df	t value
Emotional intelligence	Artist Students	100	15.2	4.6	198	2.78
	Non-Artist Students	100	12.6	3.9	198	

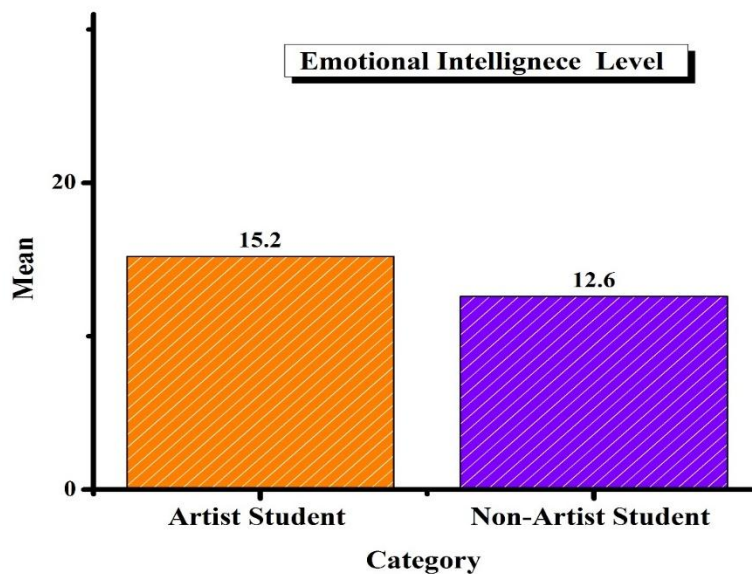


Fig.1.2 Bar chart Emotional intelligence for Artist and Non-Artist Students

Discussion of Findings

The analysis of emotional levels scores reveals interesting insights into artist and non-artist students. Preliminary observations indicate that artist adolescent students tend to exhibit slightly higher Emotional intelligence levels scores compared to their non-artist counterparts.

Suggested Implications

Educational Institutions

The findings of this extensive study hold significant implications for educational institutions. It has become evident that mental health and emotional intelligence are intricately interconnected components of students' overall well-being and development. Educational institutions should recognize the importance of fostering an environment that promotes positive mental health and provides support mechanisms for students. By acknowledging the unique challenges faced by both artist and non-artist students, institutions can implement tailored strategies that address stressors and enhance overall psychological well-being. Furthermore, incorporating creative activities and outlets into the curriculum can serve as effective tools to enhance creativity and mental health among students across disciplines.