



## EVALUATION OF COMPARATIVE EFFICACY OF MODIFIED EMOTIONAL RESILIENCE TRAINING (MERT) VS. STANDARD RESILIENCE TRAINING ON IMPULSE CONTROL (IC) AND ADJUSTMENT AMONG UNDERGRADUATE HEALTH SCIENCE STUDENTS: A RANDOMIZED CONTROL TRIAL- PROTOCOL

### Nursing Science

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### ABSTRACT

**Background:** Adolescence is a critical period where school transitions significantly influence self-perception and adjustment. Impulsivity, characterized by the inability to delay gratification and acting without forethought, negatively impacts academic performance and psychosocial factors. Emotion regulation, parental attachment, and social group attachment are known to reduce impulsivity in adolescents. Impulsivity and adjustment problems are linked to risky behaviours, poor academic performance, and mental health issues. **Objectives:** This study aims to examine the impact of an Emotional Resilience Training Program (ERT) on impulsivity and adjustment issues among Ayurveda students. The program is designed to enhance coping skills, emotional regulation, and social support. **Methods:** The study is a two-arm parallel open-labelled randomized control trial involving 200 undergraduate Ayurveda students from Vidarbha region. Participants will be randomly assigned to the ERT intervention and a control group. The intervention includes sessions on competence, confidence, connection, character, contribution, coping, and control. Data will be collected using the Barratt Impulsiveness Scale (BIS-11) and the College Adjustment Scale (CAS) before and after the intervention. Results: Statistical analyses will include T-tests for continuous variables and chi-square tests for categorical variables, with a focus on comparing pre- and post-intervention scores on impulsivity and adjustment scales. Multivariate analysis will control for confounding variables. **Discussion:** This study will provide insights into the effectiveness of targeted interventions like ERT in improving academic and psychosocial outcomes for medical students. **Conclusion:** The findings will contribute to the development of effective strategies for addressing impulsivity and adjustment issues, ultimately enhancing the academic performance and well-being of students.

### KEYWORDS

#### INTRODUCTION:-

Schools and academic environments are currently some of the most prevalent settings for adolescents. Researchers believe that the transition to school can greatly influence an adolescent's self-perception and their perception of others, making the adjustment process challenging.(1) Impulsiveness is the inability to delay gratification and the tendency to react quickly, whether internally or externally, without planning or considering the immediate and long-term consequences for oneself and others.(2) Literature highlights that impulsivity in adolescence is negatively linked to various psychosocial factors, but research on multiple contributing factors and their influence on impulsivity and risk behaviours is limited. Findings revealed that emotion regulation, parental attachment, and social group attachment reduce impulsivity in both younger and older adolescents.(3) Impulsive can also worsen school adjustment, especially when coupled with low self-esteem and depression, and predict academic cheating. Overall, impulsivity poses significant challenges to students' academic success and social well-being.(4) Yang et al. reported that impulsivity and depressive symptoms acted as mediating factors in the relationship between emotion regulation and emotional eating among e students in China.(5) Students need to be adaptable, plan effectively, and make decisions to achieve their goals. Flexibility involves adjusting to changing priorities and demands while exercising self-control.(6) Thus, highlights the need for targeted interventions to enhance emotion regulation and social support to mitigate impulsivity and improve academic performance among adolescents

#### BACKGROUND AND RATIONALE

Impulsivity is a significant aspect of personality traits and neuropsychological functions. It is characterized by the inability to refrain from responding despite potential negative consequences, acting without forethought, or making decisions before all necessary information is available.(7) Students in various medical disciplines need above-average intelligence to grasp complex subjects related to the human body and life sciences. Impulse control, or patience, is crucial in health professional education. (8) Young adults, especially college students, often experience high levels of stress, which can adversely affect both their academic performance and health. There is limited research on how stress contributes to impulse control disorders in this population.(9)

According to DSM-IV, the adjustment disorder is defined as "the

presence of emotional or behavioural symptoms in response to an identifiable stressor, occurring within 3 months of the onset of the stressor, these symptoms are clinically demonstrated as either of the following: marked distress, in excess to what would be expected from exposure to the stressor, or significant impairment of social, occupational, or academic functioning". (10) Various factors, including tight schedules, heavy workloads, fear of failure, and highly competitive environments, contribute to increased stress and psychological issues among students. Psychological distress is more common among medical students compared to their non-medical peers, with a global anxiety prevalence of 33.8% among medical students. Stress levels are particularly high among first-year medical students, who must manage a range of stressors within a short timeframe.(11)

Study in past found that medical students at a Saudi medical college experienced poor sleep quality and high levels of psychological stress, with significant associations between poor sleep and increased stress levels, as well as daytime napping. These findings highlight the need for further investigation into how sleep quality and stress affect academic outcomes. (12) Further exploration in this area is essential as previously only literatures shown the results only for non-medical students thus there is a need to develop targeted interventions and support strategies for medical students dealing with these issues.

#### TREATMENT GROUPS:

Emotional Resilience Therapy (ERT) is a type of therapy that focuses on helping individuals develop the ability to cope with stress and adversity. Resilience training can be the effective approach for addressing adjustment problems in undergraduate students by focusing on building resilience through the development of positive emotions, social support, and coping skills. Resilience therapy focuses on enhancing individuals' ability to cope with adversity and to bounce back from negative experiences.

#### AIM & OBJECTIVES:-

1. To find the effect of Emotional Resilience Training Programme on impulsivity and adjustment problems of ayurveda students.
2. To find the effect of Emotional Resilience Training Programme (Modified) on impulsivity and adjustment problems of ayurveda students.
3. Compare the effect of Emotional Resilience Training Programme on impulsivity and adjustment problems of ayurveda students.

4. To find prevalence and causes for impulsivity disorder and adjustment disorders among ayurveda students.

**STUDY DESIGN:** - Two arm parallel open labeled randomized control trial

**STUDY SETTING:** - This randomized control trial community-based study will enrol the medical students as the participants Vidarbha Region Maharashtra, Study has already received the approval from the institutional ethics committee. Consent will be taken from the participant after explaining the purpose of the study. Study will be performed with exercise of 7 days described with activity stated above. Data will be collected at one month post intervention period.

**STUDY PERIOD:** - Six Months

**STATISTICAL ANALYSIS PLAN:** - statistical calculation will be done by using chi-square and other tests using SPSS software.

**DISCUSSION:** - Thus, present study will help to identify the problems and address the issues with treatment modalities to find the results.

**Competitors Control Group: - Emotional Resilience Therapy (ERT)**

7 <sup>th</sup> Cs	Objectives and goals	Programme – Implementation
Competence	Recognizing and nurturing young people's skills and abilities, allowing them to feel capable and accomplished.	This session will include students in general, way-out of finding the skills they have.
Confidence	Building self-assurance and belief in one's capabilities to navigate obstacles and setbacks.	This session will guide them how they can think differently to enhance their knowledge and skill.
Connection	Cultivating meaningful relationships with others, fostering a sense of belonging and support.	This session will teach them to interact with people outside classroom in with patient's, relatives' communities.
Character	Developing a strong moral compass and commitment to integrity, guiding behaviour towards ethical decision-making.	This group discussion with program engaged in discussions about ethical dilemmas in healthcare, exchanging personal experiences.
Contribution	Encouraging acts of service and generosity towards others, reinforcing the positive impact of giving back to society.	This session will lecture on how importantly they can contribute to the well-being of the society and can receive the gratitude and feels good about it.
Coping	Equipping young individuals with healthy strategies to manage stress and adversity.	This session will guide the students in general, for exam preparation & will be emphasizing on various coping strategies that can be implemented for dangerous quick fixes when felt stressed
Control	Teaching the importance of accountability and responsibility in earning privileges and respect, fostering a sense of agency.	This session will explain the responsibility and importance of their work and choosing the correct path, ultimately achieving the earned privileges and respect through their work

**Interventional: -Emotional Resilience Training Programme (Modified): -**

Examining: Introduction of psychoeducation on resilience to teach, self-identifying the factors associating for their poor resilience and adjustment problems

Motivation: - This is planned for motivating the individuals for regular exercises believing them to see impactful results of the programme
Overcoming: -This programme practices students allowing thoughts to exist and acknowledging the discomfort and accept it without struggle to overcome the feeling of fear stress or anxiety.
Therapy/ Treatment: This programme will educate participants on emotional management strategies. It will practice them finding the management strategies to overcome on the issues with mindfulness exercises mindfulness exercises for eating, sound and sight, breathing, physical sensations
Integrated Solution: - Encouraging the students discussing about impulsivity and adjustment issues and share their experiences for about thoughts of strategic management.
Observe Self :- Participants will be encouraged to practice mindfulness during the session and then share their experiences with the group. They receive psychoeducation on the difference between the "observer self" and the "conceptualized self."
Nurturing the skill: - This session will include students in general, way-out of finding the skills they have.
Admiring: This will include how they can interact in community for admiring the gratitude importantly they can contribute to the well-being of the society and can receive the gratitude and feels good about it.
Learning: -This session will guide the students in general, for exam preparation & will be emphasizing on various coping strategies that can be implemented for dangerous quick fixes when felt stressed

#### REFERENCES:

- McVarnock AM, Closson LM. Motivations for social withdrawal and academic adjustment in emerging adulthood. *Br J Dev Psychol*. 2022 Jun;40(2):352–67.
- Amorim Neto R do C, True M. The development and treatment of impulsivity. *PSICO*. 2011;42(1):134–41.
- Carvalho CB, Arroz AM, Martins R, Costa R, Cordeiro F, Cabral JM. "Help Me Control My Impulses!": Adolescent Impulsivity and Its Negative Individual, Family, Peer, and Community Explanatory Factors. *J Youth Adoles*. 2023 Dec 1;52(12):2545–58.
- Lee HS, Oak JW. Effects of impulsive behavior, self esteem, and depression on school adjustment of adolescents. *The Journal of the Korea Contents Association*. 2012;12(1):438–46.
- Yang H, Zhou X, Xie L, Sun J. The effect of emotion regulation on emotional eating among undergraduate students in China: the chain mediating role of impulsivity and depressive symptoms [Internet]. *medRxiv*; 2023 [cited 2024 Jul 27]. p. 2023.01.09.23284356. Available from: <https://www.medrxiv.org/content/10.1101/2023.01.09.23284356v1>
- Jelihovschi AP, Cardoso RL, Linhares A. An analysis of the associations among cognitive impulsiveness, reasoning process, and rational decision making. *Frontiers in Psychology*. 2018 Jan 12;8:2324.
- Ghahramani MH, Sohrabi M, Kakhki AS, Besharat MA. The Effects of Physical Activity on Impulse Control, Attention, Decision-Making and Motor Functions in Students with High and Low Impulsivity. *Biosci Biotechnol Res Asia*. 2016 Sep 25;13(3):1689–96.
- Sarode R, Tendolkar V. Relationship between Intelligence and Impulse Control Among New Entrants Studying in Various Medical Disciplines. *J Datta Meghe Inst Med Sci Univ*. 2019 Dec;14(4):338.
- Leppink EW, Odlaug BL, Lust K, Christenson G, Grant JE. The Young and the Stressed: Stress, Impulse Control, and Health in College Students. *J Nerv Ment Dis*. 2016 Dec;204(12):931–8.
- Association AP. Diagnostic and Statistical Manual of Mental Disorders. Text Revis [Internet]. 2000 [cited 2024 Jul 27]; Available from: <https://cir.nii.ac.jp/crid/1573950399819987840>
- Mabyuure N. A non-traditional method of teaching general practice to medical students: notes summarising. *Br J Gen Pract J R Coll Gen Pract*. 2012 Feb;62(595):70.
- Alotaibi AD, Alosaimi FM, Alajlan AA, Bin Abdulrahman KA. The relationship between sleep quality, stress, and academic performance among medical students. *J Fam Community Med*. 2020;27(1):23–8.