Research Article **ISSN: 2581-8015**

International Journal of Nursing and Healthcare Research

Journal home page: www.ijnhr.com

https://doi.org/10.36673/IJNHR.2026.v10.i02.A13



EFFECTIVENESS OF AN EDUCATIONAL MODULE ON ANXIETY AND COPING SKILLS AMONG STUDENTS APPEARING FOR BOARD EXAMINATION IN SELECTED SCHOOLS, COIMBATORE

A. Vedhadarly*[1] and V. Sneka[1]

[1*]Texcity College of Nursing, Coimbatore, Affiliated with Dr. M.G.R. Medical University, Chennai, Tamilnadu, India.

ABSTRACT

A quantitative research approach was adopted to assess the effectiveness of an educational module on anxiety and coping skills among students appearing for board examination in a selected schools, Coimbatore. The research design used for the study was a quasi-experimental, pre-test and post-test control group design. The sample consisted of 60 board examination students, with 30 students in the experimental group and 30 students in the control group, who were selected using a purposive sampling technique. The data were collected using a 10-item Westside Test Anxiety Scale to assess the level of anxiety and a 30-item rating scale to assess the level of coping skills. An educational module on anxiety and coping skills management was administered to the experimental group. The post-test was conducted after the intervention. The collected data were analyzed using descriptive and inferential statistics, including frequency, percentage, mean, standard deviation, paired 't' test, unpaired 't' test and chi-square test to determine the effectiveness of the educational module.

KEYWORDS

Educational module, Anxiety, Coping skills, School students and Board examination.

Author for Correspondence:

Vedhadarly A,
Department of Mental Health Nursing,
Texcity College of Nursing,
Coimbatore, Tamil Nadu, India.

Email: snekasweety04@gmail.com

INTRODUCTION

Education is a fundamental pillar of human development and serves as the foundation for the intellectual, emotional, social and psychological growth of an individual. During adolescence, education plays an important role in shaping personality, decision-making abilities, self-confidence and future career aspirations. Among examinations, board examinations occupy a unique position because they significantly influence higher

education opportunities, career pathways and future aspirations. Consequently, students preparing for board examinations often experience considerable academic pressure arising from parental expectations, competition among peers, teachers' expectations, fear of failure, and uncertainty regarding future educational opportunities.

Examination anxiety has become a major public health and educational concern among adolescents. It is characterized by excessive worry, fear, nervousness, tension, and emotional distress before or during examinations, which interferes with concentration, memory, decision-making and academic performance. In India, increasing academic competition, parental expectations, peer comparison, extensive syllabus and concerns about higher education have contributed to the growing burden of examination anxiety. Persistent examination anxiety may result in headache, palpitations, sweating, sleep disturbances, irritability, poor concentration, negative thinking, and fear of failure, thereby affecting academic performance and overall quality of life.

Coping skills refer to the cognitive, behavioural, and emotional strategies adopted by individuals to manage stressful situations effectively. Adaptive coping strategies include positive thinking, effective time management, problem-solving, relaxation exercises, deep breathing, mindfulness, healthy lifestyle practices, adequate sleep and seeking social support. In contrast, maladaptive coping strategies such as avoidance, procrastination, social withdrawal, and negative self-talk may worsen anxiety and reduce academic performance. Therefore, developing coping skills among adolescents is considered an effective approach for reducing examination anxiety and promoting mental well-being.

Educational interventions have emerged as effective and economical approaches for preventing and reducing examination anxiety among school students. An educational module is a systematically planned teaching programme developed to improve students' knowledge, attitude and practice regarding stress management and healthy coping strategies. Such modules generally include examination anxiety, time management, study planning, relaxation techniques, positive thinking, emotional regulation, problem-solving skills, healthy lifestyle practices and social support. Previous research has demonstrated the effectiveness of educational and psychological interventions in reducing examination anxiety and improving students' psychological well-being.

Mental health nurses play a crucial role in promoting the psychological well-being of adolescents through mental health assessment, psycho education, counselling, coping and stress-management techniques and evidence-based mental health promotion programmes. Schools are considered ideal settings for implementing such interventions.

In Coimbatore, similar to other urban areas, increasing academic competition and societal expectations have contributed to rising stress levels among students appearing for board examinations. Despite the growing concern, there is limited research focusing on the effectiveness of structured educational interventions on anxiety and coping skills among this population

NEED FOR THE STUDY

According to the American Academy of Child and Adolescent Psychiatry (AACAP, 2018), academic stress is one of the most common causes of anxiety among children and adolescents. The organization reported that excessive pressure to achieve high academic performance can result in emotional distress, behavioral problems and physical symptoms such as headaches, fatigue, and sleep disturbances. AACAP also emphasized that untreated anxiety in adolescents may lead to more serious mental health disorders, including depression and substance abuse, highlighting the importance of early intervention and preventive strategies.

The United Nations Children’s Fund (UNICEF, 2022) stated that mental health problems account for a significant portion of the global burden of disease among adolescents. It estimated that approximately 40% of adolescents experience mental health issues, including anxiety and depression. UNICEF identified academic pressure, especially examination-related stress, as a key contributing

factor. The report emphasized the need for school-based interventions to promote mental well-being and equip students with coping skills.

Further, UNICEF (2021) in its global mental health report highlighted that one in seven adolescents aged 10-19 years suffers from a diagnosed mental health disorder. Anxiety disorders were identified as one of the leading conditions affecting adolescents worldwide. The report stressed the importance of integrating mental health education into school systems and providing structured support to help students manage stress effectively.

Therefore, considering the increasing prevalence of anxiety among adolescents in recent years, the lack of effective coping mechanisms among students, and the limited availability of structured school-based interventions, there is a strong need to conduct this study. The present study aims to evaluate the effectiveness of an educational module on anxiety and coping skills among students appearing for board examinations. The findings of this study will help in developing evidence-based strategies to promote mental health and improve academic performance among students.

Statement of the problem

"Effectiveness of an educational module on anxiety and coping skills among students appearing for board examination in selected schools, Coimbatore."

Objectives of the study

To assess the pre-test and post-test levels of anxiety and coping skills among students in the experimental and control group.

To evaluate the effectiveness of the educational module by comparing the pre-test and post-test levels of anxiety and coping skills among students in the experimental group.

To compare the post-test levels of anxiety and coping skills between the experimental and control group.

To find out the association between the pretest levels of anxiety with the selected demographic variables in experimental group

To find out the association between the pretest levels of coping skills with the selected demographic variables in experimental group.

Hypothesis

H_1: There will be a significant difference between the pre-test and post-test levels of anxiety and coping skills scores among students in the experimental and control group

H_2: There will be a significant difference between the pre-test and post-test levels of anxiety and coping skills scores among students in the experimental group

H_3: There will be a significant difference in the post-test levels of anxiety and coping skills scores between the experimental and control group.

H_4: There will be a significant association between the pre-test levels of anxiety with the selected demographic variables in experimental group

H_5: There will be a significant association between the pre-test levels of coping skills with the selected demographic variables in experimental group.

RESULTS

Among the students in the experimental group, during the pre-test, 16(53.3%) had mild anxiety and 14(46.7%) had moderate anxiety, and none of them had low or severe anxiety. During the post-test, 18(60%) had low anxiety and 12(40%) had mild anxiety and none of them had moderate or severe anxiety. In the control group, during the pre-test, 17(56.7%) had mild anxiety and 13(43.3%) had moderate anxiety and none of them had low or severe anxiety. During the post-test, 16(53.3%) had mild anxiety, 13(43.3%) had moderate anxiety and 1(3.3%) had low anxiety and none had severe anxiety.

Regarding coping skills, in the experimental group, during the pre-test, 16(53.3%) had low coping skills and 13(43.3%) had moderate coping skills, and none of them had high coping skills. During the post-test, 17(56.7%) had high coping skills and 14(46.7%) had moderate coping skills, and none of them had low coping skills. In the control group, during the pre-test, 19(63.3%) had low coping skills and 11(36.7%) had moderate coping skills and none of them had high coping skills. During the post-test, 18(60%) had low coping skills and 12(40%) had moderate coping skills and none of them had high coping skills.

The findings revealed that, in the experimental group, the pre-test mean score of anxiety was 29.53 with SD ±5.74, whereas the post-test mean score was 18.40 with SD ±5.89. The calculated paired 't' value was t=9.87, which was found to be statistically highly significant at $p<0.05$ level.

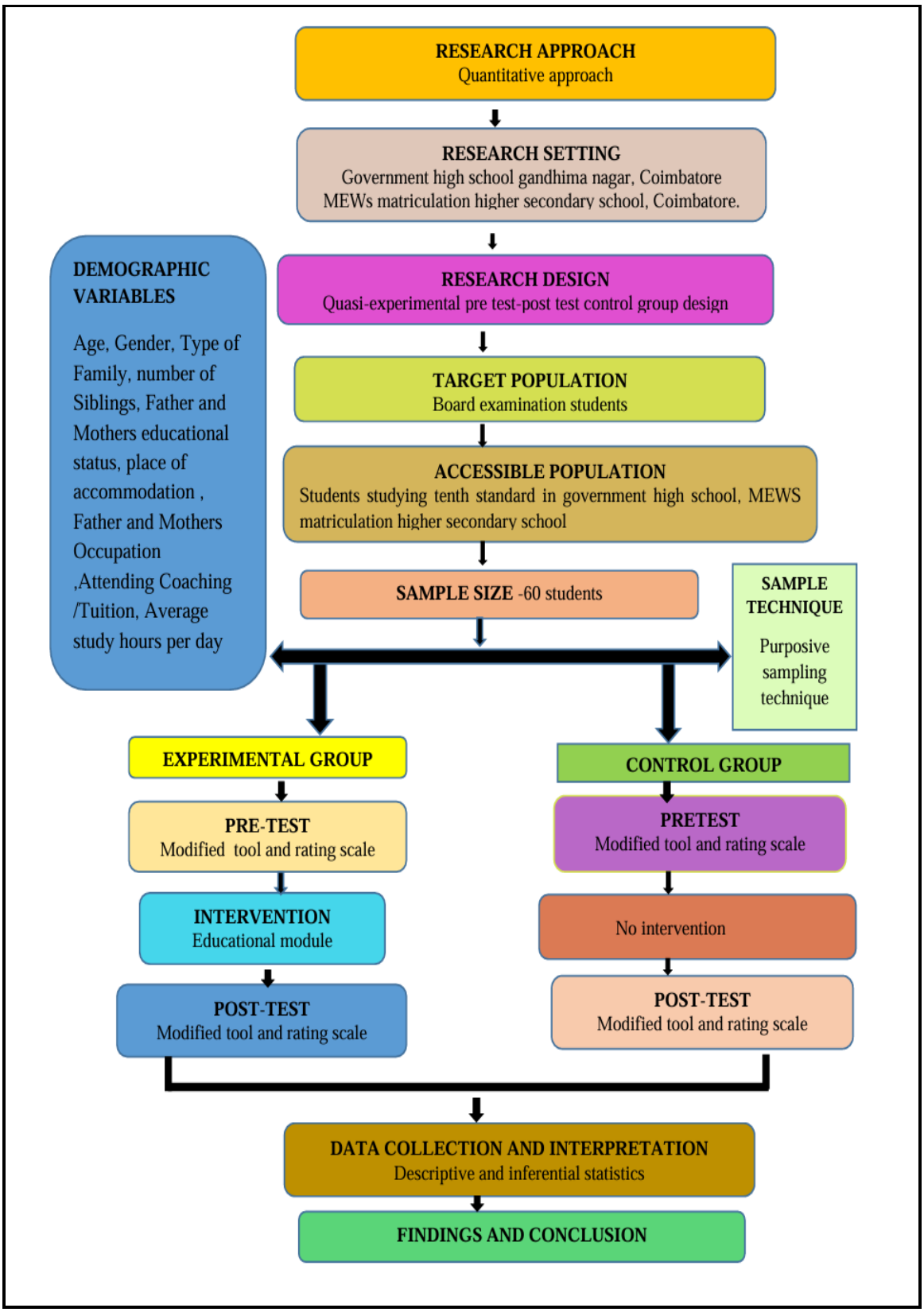
Regarding coping skills, in the experimental group, the pre-test mean score was 58.7 with SD ±16.7, whereas the post-test mean score was 98.5 with SD ±16.6. The calculated paired 't' value was t=8.79, which was found to be statistically highly significant at $p<0.05$ level.

The comparison of post-test scores between the experimental and control groups showed that the post-test mean score of anxiety was 18.40 with SD ±5.89 in the experimental group and 28.77 with SD ±5.89 in the control group. The calculated unpaired 't' value was t=6.74, which was found to be statistically highly significant at $p<0.05$ level. The post-test mean score of coping skills was 98.5 with SD ±16.6 in the experimental group and 56.9 with SD ±14.5 in the control group. The calculated unpaired 't' value was t=8.15, which was found to be statistically highly significant at $p<0.05$ level. Hence, H_1 was retained.

There was a statistically significant association between the pre-test level of anxiety and age in years in the experimental group ($\chi^2=11.31$) at $p<0.05$ level. The other selected demographic variables did not show a statistically significant association with the pre-test level of anxiety among students appearing for board examination at $p<0.05$ level in the experimental group.

There was a statistically significant association between the pre-test level of coping skills and age in years in the experimental group ($\chi^2=10.62$) at $p<0.05$ level. The other selected demographic variables did not show a statistically significant association with the pre-test level of coping skills among students appearing for board examination at $p<0.05$ level in the experimental group.

METHODOLOGY



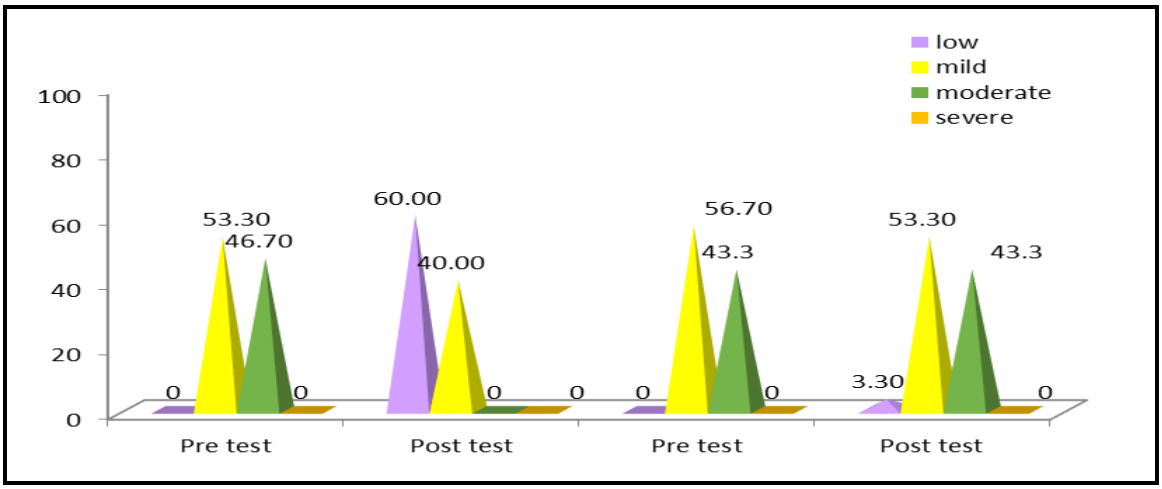


Figure No.1: Experimental group and control group

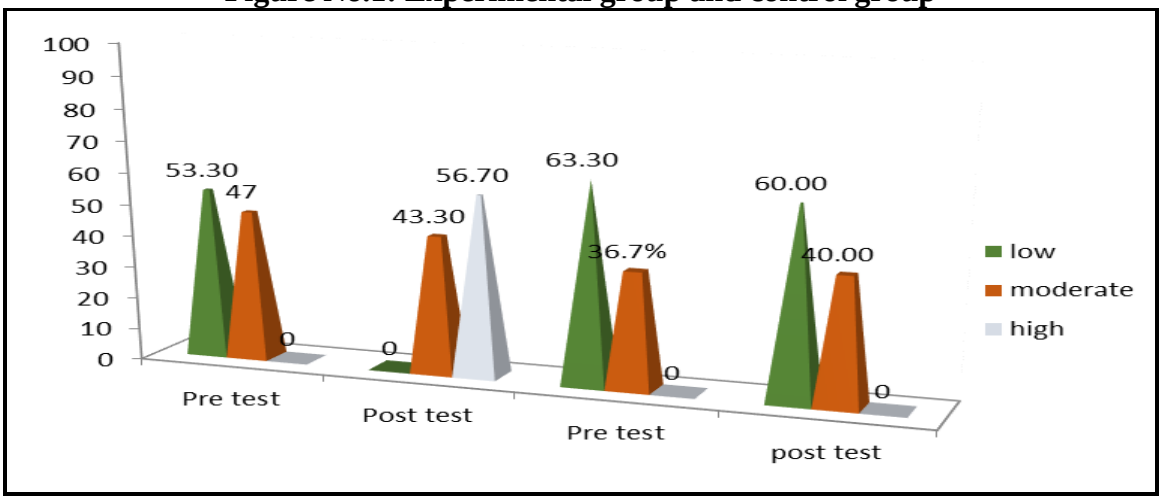


Figure No.2: Experimental group and control group

CONCLUSION

The present study concluded that the educational module was effective in reducing anxiety and improving coping skills among students appearing for board examinations.

The findings of the study revealed that the educational module significantly improved the coping skills and reduced the level of anxiety among the students after the intervention.

The study concluded that the educational module is a simple, feasible and cost-effective intervention that can be effectively utilized by nurses in school and community settings to promote the mental well-being of students.

RECOMMENDATIONS

Similar studies can be conducted among a larger sample in different geographical settings to strengthen the evidence regarding the effectiveness of the educational module on anxiety and coping skills among students appearing for board examinations.

Further studies can be conducted focusing not only on anxiety and coping skills but also on other psychological variables such as stress, resilience, self-esteem and academic performance among students.

Comparative studies can be conducted among students from rural and urban schools, government and private schools, and different age groups to identify variations in anxiety and coping skills.

Interventional studies using different educational approaches such as group discussion, structured teaching programme, counselling sessions and peer education can be undertaken and compared with the educational module.

Longitudinal studies can be conducted to evaluate the long-term effectiveness of the educational module in reducing anxiety and improving coping skills among students.

The educational module can be implemented as a part of school health education programmes, and its effectiveness can be evaluated in various educational settings

ACKNOWLEDGEMENT

The authors is sincerely thankful to Department of Mental Health Nursing, Texcity College of Nursing, Coimbatore, Tamilnadu, India for providing the facilities to carry out this research work.

CONFLICT OF INTEREST

We declare that we have no conflict of interest.

BIBLIOGRAPHY

1. Barlow D H. Clinical handbook of psychological disorders, *The Guilford Press*, 5th Edition, 2014, 112-130.
2. Basavanthappa B T. Nursing research, *Jaypee Brothers Medical Publishers*, 3rd Edition, 2014, 285-302.
3. Kaplan H I, Sadock B J. Synopsis of psychiatry, *Wolters Kluwer*, 11th Edition, 2015, 706-718.
4. Kothari C R. Research methodology: Methods and techniques, *New Age International Publishers*, 2nd Edition, 2004, 31-52.
5. Lalitha K. Mental health and psychiatric nursing, *VMG Book House*, 1st Edition, 2015, 96-112.
6. Morrison J. DSM-5 made easy: The clinician's guide to diagnosis, *The Guilford Press*, 1st Edition, 2014, 18-35.
7. Neeraja K P. Essentials of mental health and psychiatric nursing, *Jaypee Brothers Medical Publishers*, 1st Edition, 2011, 84-101.
8. Polit D F, Beck C T. Nursing research: Generating and assessing evidence for nursing practice, *Wolters Kluwer*, 10th Edition, 2017, 221-240.
9. Sreevani R. A guide to mental health and psychiatric nursing, *Jaypee Brothers Medical Publishers*, 4th Edition, 2016, 175-191.
10. Stuart G W. Principles and practice of psychiatric nursing, *Elsevier*, 10th Edition, 2013, 312-326.
11. Townsend M C. Psychiatric mental health nursing: Concepts of care in evidence-based practice, *F.A. Davis Company*, 9th Edition, 2018, 245-260.
12. Varcarolis E M. Essentials of psychiatric mental health nursing, *Elsevier*, 3rd Edition, 2017, 150-167.
13. Videbeck S L. Psychiatric-mental health nursing, *Wolters Kluwer*, 8th Edition, 2020, 198-214.
14. Jirjees F, *et al*. Test anxiety and coping strategies among university students: An exploratory study in the UAE, *Scientific Reports*, 14(1), 2024, 1-12.
15. Kroener J, *et al*. Coping with test anxiety using imagery rescripting: A two-session randomized controlled trial, *Journal of Affective Disorders*, 356, 2024, 554-563.
16. Macri E, Migali G. The effect of test anxiety on high-stakes exams: Evidence from an RCT using biomarkers, *Education Economics*, 33(5), 2024, 515-533.
17. Dundas I, Nygard I. Mindfulness for test anxiety and negative self-evaluation in high school, *Current Psychology*, 43, 2024, 30027-30037.
18. Ginter A C, Baldwin D R, Interventional strategies to reduce test anxiety among nursing students: A systematic review, *Nursing Reports*, 13(1), 2023.
19. Khaira M, Raja Gopal R L, Mohamed Saini S, Md Isa Z. Interventional strategies to reduce test anxiety among nursing students: A systematic review, *International Journal of Environmental Research and Public Health*, 20(2), 2023, 1233.

20. Shaban M, Khademian Z. The effect of a stress and anxiety coping program on objective structured clinical examination performance among nursing students in Shiraz, Iran, *BMC Medical Education*, 20, 2020, 1-7.
21. Huntley C D, Young B, Temple J, Longworth M, Tudur Smith C, Jha V. The efficacy of interventions for test-anxious university students: A meta-analysis of randomized controlled trials, *Journal of Anxiety Disorders*, 63(2), 2019, 36-50.
22. Jamieson J P, Black A E, Pelaia L E, Reis H T. Reappraising test anxiety increases academic performance of first-year college students, *Journal of Educational Psychology*, 110(3), 2018, 395-406.
23. https://www.who.int/health-topics/mental-health.
24. https://www.who.int/health-topics/adolescent-health.
25. https://www.nimh.nih.gov/health/topics/anxiety-disorders.
26. https://www.nimh.nih.gov/health/publications/generalized-anxiety-disorder-gad.
27. https://www.unicef.org/mental-health.
28. https://www.cdc.gov/childrensmentalhealth.
29. https://www.apa.org/topics/stress.
30. https://www.nhs.uk/mental-health.
31. https://mohfw.gov.in.
32. https://nimhans.ac.in.

Please cite this article in press as: Vedhadarly A and Sneka V. Effectiveness of an educational module on anxiety and coping skills among students appearing for board examination in selected Schools, Coimbatore, *International Journal of Nursing and Healthcare Research*, 10(2), 2026, 140-147.