



RESEARCH ARTICLE

Evaluating the effectiveness of academic resilience intervention for at-risk students at higher secondary level

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Abstract

This study aims to develop an academic resilience intervention program to improve academic resilience among at-risk higher secondary school students. The experimental method was employed in this research. A sample of 50 at-risk students was selected using a stratified sampling method from the population of 305. Then, those selected 50 samples were randomly allocated to two groups, namely, the academic resilience intervention group and the other control group. The academic resilience intervention group received the resilience intervention program for nine consecutive weeks, while the control group was set aside from the academic resilience intervention program. Pre-tests and post-tests were conducted for the academic resilience intervention and control groups. The data was analyzed using paired t-tests and ANCOVA. The significant results showed that the intervention program enhanced academic resilience among higher secondary-level students. Ans most importantly, the study revealed a notably high number of at-risk students in this district. This highlights the urgent need for other local communities to evaluate the situation and if the same situation prevails, it is urgent to research to know the cause and to take immediate action to foster academic resilience for the well-being of their students. This paper's uniqueness is its potential to address at-risk students, uniquely in the Indian context, through an academic resilience intervention program.

Keywords: Academic resilience intervention program, Academic resilience, protective factors, At-risk students, Higher secondary level

Introduction

The importance of emotional education for teachers and students is growing in India, especially in Tamil Nadu. Recently, schools in this region have started integrating psychological interventions into their academic schedules to address emotional challenges that lead to dropouts or low academic performance. The primary objective of this study is to propose a specific academic resilience intervention program to increase the retention rate in the school and to, address common classroom issues, and effectively support educational institutions by enhancing academic resilience.

Academic resilience is the capability of students to succeed academically, irrespective of their underprivileged backgrounds (Blömeke, 2021), lack of emotional regulation

during their developmental stages, and inadequate support from their current educational and home environment. To enhance academic resilience among students, this paper aims to develop an academic resilience intervention programme and evaluate its effectiveness on the selected subjects of the chosen population. The structure of the training program is grounded in these theories and concentrates on developing protective factors among the students.

Resilience Theory

This theory elucidates how individuals resiliently adapt to hardship, highlights coping skills developed by the individuals, supportive relationships they develop in the family, and a positive school environment that assists students in overpowering academic challenges (Rutter, 2012).

Social Cognitive Theory

This viewpoint underlines the significance of an individual's observational learning, self-efficacy, and reciprocal determinism in behavior of the individual. This theory stresses that Academic resilience can influence students' belief in their capability to flourish toward success (self-efficacy) and the modeling of others who were victorious in similar situations and similar challenges (Bandura, 1997).

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Ecological Systems Theory (Urie Bronfenbrenner)

This theory highlights how several environmental systems network to impact a student's development. The factors include family care, peer relationships, and school climate are essential (Bronfenbrenner, 1979).

Positive Psychology

Positive Psychology dwells mainly on the inner strengths, the intrinsic worth of the person, and aspects causal to a fulfilling life. Building academic resilience involves fostering positive emotions, engagement, and a sense of achievement in students (Seligman, 2002).

Stress and Coping Theory

This very interesting theory explicates the individual's ability to manage stress through various coping strategies. Academic resilience involves teaching students effective coping mechanisms to handle academic stressors (Compas).

These theories offer a strong footing for this investigation, helping to frame and assess this Academic Resilience Intervention Programme.

Review of literature on Resilience Training Programme

Four-to-six-week academic training initiative at Rutgers University-New Brunswick was a model developed specifically to improve academic resilience in students who have self-identified as struggling academically and their academic resilience increased by participating in the weekly academic resilience intervention program (Kravits, 2024) and there are a handful of interventions. Every single intervention has its uniqueness. Some used psychotherapies like mindfulness, cognitive behavioral therapy, and some mixed models. The subjective self-reported methods are mostly avoided and better studied through experimental methods (Bonanno, 2011). However, the socio, cultural, and economic structures do give different definitions, protective factors, and measurements to academic resilience and hence, it is a new topic in any context (Wangqiong, 2021).

Robertson identified the difficulties in designing resilience training programs in its articulation of definition, procedure used, and methods used to measure are difficult to evaluate (Robertson, 2014). Primarily the research should have a sufficient theory base. The research should be different from the usual psychological intervention, and the sample should be targeted to individuals identified as vulnerable or at-risk students (Belsky, 2013). As they are already doing well, students are likely to benefit less from the intervention program. Thus, the review of the literature helped in finalizing the method of the study as experimental and the sampling method as the stratified random sampling method from the population of at-risk students.

Research Gap

A narrative literature review evaluated the literature surrounding resilience and resilience training. In his article, Fikretoglu (Fikretoglu S. F., 2018) found that the efficacy of any training programme purely hinges on the type of result observed and measured and the ambiance of the training programme. With the valuable inputs from the researches, this article will address the following gaps in the existing literature review.

- Very little research has been found on interventions aimed at building resilience among adolescents in India.
- Previous interventions have not adequately focused on students' academic resilience.
- Furthermore, there exists a minimum understanding regarding the efficacy of school-based interventions in Tamil Nadu.
- A need for training that is tailor-made to the local culture, addresses local challenges, and leverages local strengths.

Method

Objective of the study

The objective is to gauge the efficacy of the academic resilience intervention program among higher secondary students.

Hypothesis of the study

The formulated hypothesis is grounded on the objective of the study:

- There is no significant difference in academic resilience among the Academic resilience intervention participants in the academic resilience intervention group and the control group.
- There is no significant difference between the means of Types of schools.

Design of the study

A pre-test and post-test experimental method was employed as the method of investigation in this article. It focused on at-risk higher secondary students with little academic resilience who were randomly allocated to either an academic resilience intervention group or a control group. The academic resilience intervention group received the Resilience Intervention Programme for 9 weeks, while the control group was deprived of the intervention program. After the experiment, a post-test was conducted, and the substantial difference in pre-test and post-test scores between the academic resilience intervention program group and control groups was analyzed for statistical significance.

Tools for the study

The academic resilience scale (ARS-30) constructed by Simon Cassidy in 2016 (Cassidy, 2016), with three important

Table 1: Normality of the sample

	Type of School	Sample N	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
			Statistic	Df	Sig.	Statistic	Df	Sig.
Perseverance	Govt	159	.231	159	<.001	.693	159	<.001
	Aided	146	.144	145	<.001	.805	145	<.001
Help-seeking	Govt	159	.257	159	<.001	.686	159	<.001
	Aided	146	.110	145	<.001	.918	145	<.001
Negative affect	Govt	159	.289	159	<.001	.555	159	<.001
	Aided	146	.149	145	<.001	.799	145	<.001
Academic resilience total	Govt	159	.302	159	<.001	.565	159	<.001
	Aided	146	.144	145	<.001	.796	145	<.001

dimensions: perseverance, Reflecting and adaptive help-seeking, and negative affect and emotional responses, with 30 items(14 items in the dimension of perseverance, 9 items in reflecting and adaptive help-seeking, and 7 items in negative affect and emotional responses) was selected to quantify the academic resilience, which will measure the decisive factors such as persistence, self-reflection, seeking support, emotional regulation, coping with disappointments of the students, as it has high reliability and validity factors. The tool was translated into the local language with the help of a professional translator who was knowledgeable about the subject matter. Pilot testing was carried out using the test-retest method, resulting in a very high correlation ($r = 0.973$). Additionally, cognitive interviews were conducted to confirm that participants understood the questions as intended (Acquadro, 2020).

Sample for the Study

This pilot study initially collected 305 (159 students from government schools and 146 students from Government-aided schools) samples from first-year students in higher secondary schools located in the Cuddalore district of Tamil Nadu. Since the district is divided into 14 educational blocks and consists of 105 government higher secondary schools and 30 aided schools, which together form the sample population, to ensure adequate representation, a minimum of 20 samples were collected from both types of schools in each block, using a stratified random sampling method.

The data collected through 305 samples in the initial stage of the study to find the at-risk and vulnerable samples before the resilient intervention program, was subjected to a normality test and was found to be normally distributed (Table 1) as both the Kolmogorov-Smirnov and Sharpio-will test *p-values* are below 0.01 which indicated the significance at 0.01 level, which suggested the data was suitable for further study.

The 305 samples were then categorized based on their academic resilience scores. The students with scores less than 40 were identified as at-risk. Those who scored between

41 to 60 were classified as vulnerable, the students with scores above 60 as resilient students, and those who scored above 80 were classified as Highly resilient students (Table 2). Subsequently, 50 samples from the pool of 223 samples of at-risk and vulnerable students 50 were randomly chosen, out of which 25 samples were designated to the academic resilience intervention group and 25 to a control group.

Academic Resilience Intervention Programme for at-risk students

Academic resilience intervention programs are designed to help students effectively overcome academic challenges within the educational environment, ultimately enhancing their overall well-being and reflecting positively on their academic performance. Various approaches have been explored, including social and emotional learning (SEL), integration into the curriculum, and targeted support for at-risk students. The following sections summarize the key elements of these interventions.

- Social and emotional learning (SEL), like smart brain wise heart have revealed possible improvement in resilience among late bloomers (Alex, 2024).
- Integrating resilience training into existing curricula, such as neuroscience courses, has led to significant improvements in students' mental resilience and reduced mental health-related issues (Maria, 2022).
- Programs in socio-economically disadvantaged schools have focused on enhancing self-efficacy and school belonging, which are crucial for academic retention (Fenwick, 2022).

Table 2: Grouping of the students

	Grouping	Frequency	Percent
0–41	At-Risk	112	36.7
41–60	Vulnerable	111	36.4
61–80	Resilient	72	23.6
81+	Highly Resilient	10	3.3
Total		305	100.0

Table 3: Academic Resilience Intervention Programme Schedule

Scale	Sub-scales	Programme module
Academic Resilience Scale – 30	1. Perseverance	Module 1 Introduction to Academic Resilience (Chandra, 2020) Module 2 Goal setting and developing a growth mindset (Blackwell, 2007) Module 3 Overcoming obstacles and setbacks (Snyder, 2018)
	2. Reflecting and Adaptive Help-Seeking	Module 4 Self-Reflection and Awareness (Ryan, 2017) Module 5 Seeking help from teachers/ peers and building supportive networks (Sharma, 2016)
	3. Negative affect and emotional responses	Module 6 Emotional regulations (Zenner, 2014) Module 7 Stress management and mindfulness practices (Lee, 2018) Module 8 Integrating resilience skills, finding a personal resilience plan, and anchoring in a resourceful state (Wang, 2015) Module 9 Programme evaluation, feedback, and suggestions (Henderson, 2003)

This study focuses on supporting at-risk and vulnerable students. Academic resilience in these students is crucial for understanding how they emotionally respond to challenges stemming from adverse experiences, depending on their personality and individual differences, wounded interpersonal relationships, and future goals and orientations.

For instance, a study by, Tan et al. (2023) (Chee, 2023) found that academically at-risk students who exhibit resilience tend to have clearer academic goals, focused plans, and a positive attitude toward challenges. By providing an intervention program aimed at promoting this specific future orientation, we could potentially improve the academic lives of at-risk students.

Likewise, this resilience intervention program was designed to increase perseverance, foster a help-seeking attitude, and reduce negative feelings and responses among these students (see Table 3). The program was implemented over nine weeks, consisting of four 60-minute sessions each week. These sessions included interactive activities, reflection, journaling, and group discussions, all facilitated by two psychotherapists.

After the academic resilience intervention for the successive 9 weeks, the post-test was conducted on both the intervention group and control group and the obtained academic resilience scores were exposed to paired t-test and ANOVA.

Results

The data gathered from both the pre-test and the post-test of the academic resilience intervention group and control group were analyzed, and the hypotheses were verified.

Hypothesis 1: There is no significant difference in academic resilience between the Academic resilience intervention group and the control group.

The t-test *p-value* <0.01 denotes a significant difference between the means of the Academic resilience intervention group and the control group. This difference is not by a mere chance or random variation but the significant difference ($t = 3.595$) denotes the significant difference between the two groups is real. This difference is due to the effect of the

Table 4: Paired t-test between academic resilience scale pre-test and post-test

Measure 1	Measure 2	T	df	p	Cohen's d
ARS Post-test score	ARS Pre-test score	3.595	49	<0.001	1.018

Resilience intervention program. Cohen's d value is 1.018, indicating that the difference between the means of the two groups is 1.018 standard deviations.

Hypothesis 2: There is no significant difference between the means of types of schools.

The table shows the F value for the group intervention is 12.922, which is significant (0.01 level). This proves that the Resilient intervention program, an independent variable, had a significant effect on the dependent variable, academic resilience. Furthermore, the Eta square value indicates the intervention's effect size (0.216), a very high value.

Discussion

In Table 4, the effect size (Cohen's d value) is 1.08, indicating that the groups are significantly different and the resilience intervention program had a considerable impact on the experimental group. Table 5 shows an Eta square value of 0.216, indicating a large effect size. This value suggests that 21.6% of the variation in the post-test scores can be attributed to the academic resilience intervention program. From this, we can infer that the Academic resilience intervention program, as an independent variable, had a substantial 21.6% influence on the Academic resilience scores (post-test), a dependent variable.

This study followed the recommendations of Woldegiorgis and Chiramba (Woldegiorgis, 2024), who advocated for the development of inclusive curricula and support disadvantaged students both academically and socially through academic resilience interventions in the South African region, and Sarkar and Garg (Sarkar, 2020) who explored the roles of resilience and gratitude in promoting student vitality, suggesting that university administrations should implement interventions focused

Table 5: The results of the analysis of covariance

Source	Type III Sum of squares	Df	Mean Squared	F	Sig.	Partial Eta Squared
Corrected Model	2570.691 ^a	2	1285.346	316.142	<.001	.931
Intercept	10.559	1	10.559	2.597	.114	.052
ARS Pre total	2543.311	1	2543.311	625.549	<.001	.930
Groups	52.536	1	52.536	12.922	<.001	.216
Error	191.089	47	4.066			
Total	92565.000	50				
Corrected Total	2761.780	49				

Dependent Variable: ARS Post-Test Score

RSquared = .931 (Adjusted R squared = .928)

on fostering gratitude and resilience to enhance overall student well-being.

Some of the recent research aligned with the results obtained in this academic resilience intervention program. For example, Kelley *et al.* (Kelley, 2021) designed an intervention program that resulted in participants in the intervention group demonstrating increased impulse control, improved resilience, and enhanced well-being. Similarly, a study found that the intervention program promoted self-assessment practices, resilience, and creativity in task-supported language learning (Aldosari, 2023). Furthermore, Jansen and Wieland (Jansen, 2024) leveraged the U.S. Army's Master Resilience Training to show that students gained self-awareness and psychological tools essential for managing challenges, which are beneficial for personal growth and professional development.

The Smart Brain Wise Heart (SBWH) intervention demonstrated significant improvements in resilience and self-compassion among students with lower academic achievement despite overall null findings due to implementation difficulties during COVID-19 (Alex, 2024). Additionally, a study by Toledo-Rodriguez and Lister (Maria, 2022) implemented a curriculum infusion program that included workshops on the neurobiology of resilience and reflective activities aimed to enhance mental well-being and resilience skills among neuroscience students, resulting in increased optimism, adaptability, and reduced emotional reactivity, which are similar to this study.

However, a systematic review categorized resilience interventions into mindfulness, skills-based, psychoeducation, and coaching, delivered online and in-person. This review indicated that these interventions had little impact on resilience or mindfulness despite aiming to enhance these constructs and provided limited evidence of positive effects on mental health outcomes (Abulfaraj, 2024). This research aligns with theories that support the study and has contributed new knowledge in the field of academic resilience in the form of academic resilience intervention programs, particularly for at-risk students in this particular region.

Conclusion

This pilot study presented that the academic resilient intervention programme significantly enhanced resilience among higher secondary school students in Tamil Nadu, India. The study's findings align with the program's theoretical framework, which focuses on building academic resilience. These outcomes align with previous research on interventions involving resilience and highlight the potential of such programs to enhance students' mental well-being and academic achievement.

I was alarmed to notice that the number of at-risk students is increasing significantly, and most of the student's academic resilience scores are very low. If this drift is constant across other regions and states, it requires serious consideration, and educationalists need to deal with this subject as soon as possible. The academic resilience intervention programme shows promise as a valuable intervention for promoting resilience among students. Integrating it into education systems has the potential to support students' mental health and well-being, ultimately contributing to their lifelong success. Future research should continue to assess and improve the program, examining its long-term effects and potential for expansion. Furthermore, studying the program's cost-effectiveness and return on investment would certainly suggest treasured insights for policymakers and educators.

This study has research gaps which are to be addressed to enhance its significance and contributions:

- The study only measures pre-post changes, limiting the understanding of long-term effects.
- The study focuses solely on adolescents in Tamil Nadu, which limits the applicability of findings to other student populations.
- This study did investigate the total intervention program but not the individual program in the intervention program.
- This investigation did not compare the developed academic resilience intervention by the researcher with other similar interventions, which limits the understanding of its relative effectiveness.

Overall, this study will equip educators with valuable insights to identify at-risk students, understand their emotional challenges, and determine the necessary support to foster a better educational environment for vulnerable students in the specific region examined.

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References

- Abulfaraj, G. G., Upsher, R., Zavos, H. M. S., & Dommert, E. J. (2024). The Impact of Resilience Interventions on University Students' Mental Health and Well-Being: A Systematic Review. *Education Sciences, 14*(5), 510. <https://doi.org/10.3390/educsci14050510>
- Acquardo, C., Conway, K., & Giroulet, C. (2023). A step toward autonomy in education: probing into the effects of practicing self-assessment, resilience, and creativity in task supported language learning. *BMC Psychol, 11*, 423-444. <https://doi.org/10.1186/s40359-023-01478-8>
- Aldosari, M.S., Alsager, H.N. (2023). A step toward autonomy in education: probing into the effects of practicing self-assessment, resilience, and creativity in task supported language learning. *BMC Psycho, 11*, 434 <https://doi.org/10.1186/s40359-023-01478-8>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. A. W.H. Freeman and Company.
- Belsky, J., & Pluess, M. (2013). Beyond risk, resilience, and dysregulation: Phenotypic plasticity and human development. *Development and Psychopathology, 25*(4), 1243–1261. <http://dx.doi.org/10.1017/S095457941300059X>
- Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007). Implicit Theories of Intelligence Predict Achievement Across an Adolescent Transition: A Longitudinal Study and an Intervention. *Child Development, 78*(1), 246-263. <https://doi.org/10.1111/j.1467-8624.2007.00995.x>
- Bonanno, G. A., Westphal, M., & Mancini, A. D. (2011). Resilience to loss and potential trauma. *Annual Review of Clinical Psychology, 7*, 511-535. <http://dx.doi.org/10.1146/annurev-clinpsy-032210-104526>
- Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments by Nature and Design*. Harvard University Press. <https://doi.org/10.2307/j.ctv26071r6>
- Cassidy, S. (2016). The Academic Resilience Scale (ARS-30): Development, validity, and reliability. *Journal of Educational Psychology, 108*(3), 256-271. <https://doi.org/10.3389/fpsyg.2016.01787>
- Chandra, V., & Sharma, N. (2020). Developing Academic Resilience in Indian Adolescents: A School-Based Intervention. *Journal of Educational Research, 113*(4), 439-449.
- Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological Bulletin, 127*(1), 87–127. <https://doi.org/10.1037/0033-2909.127.1.87>
- Fenwick, E. K. (2022). Enhancing resilience and academic outcomes for at-risk students: A randomized controlled trial. *Journal of Educational Psychology, 114*(3), 342-357.
- Forbes, S., & Fikretoglu, D. (2018). Building Resilience: The Conceptual Basis and Research Evidence for Resilience Training Programs. *Review of General Psychology, 22*(4), 452-468. <https://doi.org/10.1037/gpr0000152>
- Henderson, N., & Milstein, M. M. (2003). *Resiliency in schools: Making it happen for students and educators* (Updated ed.). Corwin Press.
- Jansen, A.L., & Wieland, A. (2024). Developing resilient leaders: a training for students. *Journal of Leadership Education*. <https://doi.org/10.1108/JOLE-06-2024-0073>
- Kelley, T., Kessel, A.S., Collings, R.M., Rubenstein, B.P., Monnickendam, C.S., & Solomon, A.M. (2021). Evaluation of the iHEART mental health education programme on resilience and well-being of UK secondary school adolescents. *Journal of Public Mental Health, 20*(1), 43-50. <https://doi.org/10.1108/JPMH-03-2020-0019>
- Kresovich, A., MacLean, K., Lancaster, C. M., Torres, E. D., Temple, J. R., & Mumford, E. A. (2023). Experimental evaluation of a neurophysiological intervention designed to increase student resilience: a pilot study. *Journal of Child & Adolescent Mental Health, 35*(1–3), 129–146. <https://doi.org/10.2989/17280583.2024.2336473>
- Lee, J., & Lee, Y. (2018). Emotional Regulation and Academic Achievement: A Systematic Review. *Journal of Educational Psychology, 110*(3), 291-306.
- Leung, L., & Kravits, S. L. (2024). Back on Track: Measuring Academic Resilience of Students Participating in an Academic Coaching Initiative. *Learning Assistance Review, 28*(3), 67-102. <http://www.nclca.org/tlar>
- Robertson, I. T., Cooper, C. L., Sarkar, M., & Curran, T. (2015). Resilience training in the workplace from 2003 to 2014: A systematic review. *Journal of Occupational and Organizational Psychology, 88*(3), 533–562. <https://doi.org/10.1111/joop.12120>
- Rutter M. (2012). Resilience as a dynamic concept. *Development and psychopathology, 24*(2), 335–344. <https://doi.org/10.1017/S0954579412000028>
- Ryan, A. M., & Shi., S. (2017). Help-Seeking and Academic Resilience: A Systematic Review. *Journal of Educational Psychology, 109*(2), 141-151.
- Sarkar, A., & Garg, N. (2020). "Peaceful workplace" only a myth? *International Journal of Conflict Management, 31*, 709-728. DOI:10.1108/ijcma-11-2019-0217
- Seligman, M. E. (2002). *Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment*. Free Press.
- Sharma, N., & Sharma, E. (2016). Academic Resilience Among Indian Adolescents: A Study of Rural and Urban Differences. *Journal of Educational Research, 109*(4), 419-428.
- Snyder, C. R., & Lopez, S.J. (2018). Positive Psychological Interventions: A Review. *Journal of Positive Psychology, 13*(3), 257-272.
- Tan, C.S., Ilham, N.Q.B., Caleon, I. (2023). Future Orientation and Resilience of Academically At-Risk Students in Singapore. *Studies in Singapore education*. https://doi.org/10.1007/978-981-99-4705-8_4
- Toledo-Rodriguez, M., & Lister, K. (2022). Resilience in the curriculum: outcomes of a curriculum infusion intervention with neuroscience students. *Widening Participation and*

- Lifelong Learning, 24(1), 139-164. <https://doi.org/10.5456/WPLL.24.1.139>
- Wang, X. Gordon, J. (2015). Academic Resilience and Motivation: A Systematic Review. *Educational Psychology Review*, 27(3), 395-413.
- Woldegiorgis, E. T., & Chiramba, O. (2024). Access and success in higher education: fostering resilience in historically disadvantaged students in South Africa. *Journal of Applied Research in Higher Education*. <https://doi.org/10.1108/JARHE-05-2023-0217>
- Ye, W., Strietholt, R., & Blömeke, S. (2021). Academic resilience: Underlying norms and validity of definitions. *Educational Assessment, Evaluation and Accountability*, 33(1), 169–202. <https://doi.org/10.1007/s11092-020-09351-7>
- Zenner, C., Herrnleben-Kurz, S., & Walach, H. (2014). Mindfulness-based interventions in schools-a systematic review and meta-analysis. *Frontiers in psychology*, 5, 603. <https://doi.org/10.3389/fpsyg.2014.00603>