

Academic Achievement and Psychological Stress among Twelfth-Grade Students in Thiruvananthapuram District, Kerala: An Ex-Post Facto Study

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Abstract

Academic achievement is an important indicator of educational progress and assumes particular significance during the higher secondary stage. Twelfth grade represents a critical educational transition because students' academic performance may influence higher education opportunities, career choices, and future aspirations. At the same time, examination demands, parental expectations, teacher expectations, peer competition, workload, and uncertainty regarding future educational and career outcomes may contribute to psychological stress among adolescents. The present study aims to examine the relationship between academic achievement and psychological stress among Twelfth-Grade students in Thiruvananthapuram district, Kerala. An ex-post facto research design is adopted because the variables occur naturally and are not manipulated by the researcher. A sample of 390 Twelfth-Grade students is being selected through multi-stage stratified random sampling, with representation from government, aided, and unaided schools and from Science and Commerce streams. The proposed sample consists of 195 boys and 195 girls. Standardised psychological measures will be employed, and academic achievement will be assessed using an appropriate academic performance indicator. Since primary data collection is currently in progress, the present article reports findings derived from verified secondary educational statistics and previously published empirical studies rather than from the proposed primary sample. Official secondary data indicate that 33,282 students were enrolled in higher secondary education in Thiruvananthapuram district during 2023–24 and that the district had 178 higher secondary schools in 2024. At the state level, the Higher Secondary examination pass percentage declined from 85.14% in 2019–20 to 78.69% in 2023–24. Previous empirical studies have also documented substantial academic stress, parental pressure, and examination anxiety among Indian higher secondary students. These findings provide a strong contextual rationale for examining psychological stress in relation to academic achievement among Twelfth-Grade students in Thiruvananthapuram. The primary investigation will subsequently provide empirical evidence concerning the relationship between academic achievement and psychological stress and differences across selected student characteristics.

Keywords: Academic achievement, psychological stress, academic stress, Twelfth-Grade students, higher secondary education, adolescents, Kerala, ex-post facto research

1. Introduction

Education plays a central role in the intellectual, emotional, social, and vocational development of adolescents. Academic achievement is commonly regarded as one of the major indicators of educational progress and becomes particularly important during the higher secondary stage. At this stage, students encounter an important transition towards higher education, professional education, vocational pathways, or employment.

In the Indian educational context, Twelfth grade is frequently perceived as a decisive stage. Performance in higher secondary examinations may influence admission to undergraduate and professional programmes and may shape students' perceptions of their future opportunities. Consequently, academic achievement may become closely connected with parental expectations, peer comparison, career aspirations, and perceived future success.

Academic achievement itself is not inherently detrimental to psychological well-being. Success may contribute to motivation, self-efficacy, confidence, and educational progression. However, excessive emphasis on marks and competitive performance may increase psychological pressure. Students may experience concerns about examinations, fear of failure, parental expectations, comparison with peers, private tuition, workload, and uncertainty about higher education and career choices.

Psychological stress may be understood as the psychological strain experienced when individuals perceive that environmental demands exceed, or may exceed, their available coping resources. Lazarus and Folkman (1984) conceptualised stress through the interaction between individuals and their environment, emphasising cognitive appraisal and coping. From this perspective, the same academic demand may be experienced differently by different students depending on their appraisal, coping resources, social support, and personal characteristics.

Adolescence is also a period of substantial developmental change. Students are simultaneously negotiating physical, emotional, social, academic, and career-related changes. Compas et al. (2017), in a large meta-analysis and narrative review, highlighted the importance of coping and emotion regulation in understanding psychological symptoms during childhood and adolescence.

The educational context of Kerala provides a particularly relevant setting for examining these issues. Higher secondary education involves large numbers of students preparing for examinations that may influence subsequent educational opportunities. The present study therefore focuses specifically on Twelfth-Grade students in Thiruvananthapuram district.

The purpose of the study is to examine academic achievement and psychological stress among Twelfth-Grade students and to determine whether the two variables are significantly associated. The study also considers whether psychological stress and academic achievement differ according to gender, school management, and academic stream.

2. Background and Review of Literature

2.1 Academic Achievement and Academic Pressure

Academic achievement refers to students' performance in educational activities and is commonly represented through examination marks, grades, or other indicators of academic performance. During higher secondary education, achievement may acquire additional significance because students are required to make decisions regarding higher education and careers.

Academic achievement can therefore function both as an educational outcome and as a source of perceived pressure. Students who attach considerable importance to achievement may experience concern regarding examination performance, future educational opportunities, and expectations from significant others.

2.2 Academic Stress among Indian Students

Deb, Strodl, and Sun (2014) examined academic-related stress among 400 adolescent students from private secondary schools in Kolkata who were studying in Grades 10 and 12. Their study investigated the prevalence of academic stress and examination anxiety and their association with socioeconomic and study-related factors.

In another study, Deb, Strodl, and Sun (2015) examined 190 students from Grades 11 and 12 in Kolkata. The study reported that 63.5% of students experienced stress because of academic pressure, 66.0% experienced parental pressure for better academic performance, and 81.6% reported examination-related anxiety. Academic stress was positively associated with parental pressure and psychiatric problems.

These findings are particularly relevant to the present investigation because the participants in the present study are also higher secondary students approaching a critical educational transition.

2.3 Academic Stress among Adolescent Girls

Rentala et al. (2019) investigated academic stress among 314 adolescent girls aged 16–19 years in Dharwad, India. The study reported a mean educational stress score of 50.04 ± 10.82 and identified several factors associated with educational stress, including parental educational background, subject combination, personality characteristics, and intelligence. The findings indicate that academic stress among adolescents may be influenced by multiple personal, family, and educational factors rather than by academic workload alone.

2.4 Perceived Sources of Academic Stress

Bedewy and Gabriel (2015) developed the Perception of Academic Stress Scale to assess perceived sources of academic stress among university students. Their 18-item scale identified four theoretically meaningful factors and demonstrated evidence of internal consistency and content validity. Although the participants were university students, the study provides a useful conceptual basis for understanding academic expectations and stressors in educational settings.

2.5 Stress and Student Well-Being

Pascoe, Hetrick, and Parker (2020) reviewed evidence concerning stress among students in secondary and tertiary education. Their review indicates that academic-related stress can affect learning capacity, academic performance, motivation, psychological health, sleep, and overall well-being. The authors

emphasised that students encounter a range of ongoing academic stressors during their educational trajectories.

Compas et al. (2017), based on a meta-analysis of 212 studies involving 80,850 participants, reported associations between coping and emotion regulation and psychological symptoms in children and adolescents. Adaptive coping and emotion-regulation processes were generally associated with lower psychological symptoms, whereas maladaptive coping and disengagement-related strategies were associated with higher symptoms.

2.6 Theoretical Perspective

The present study is informed primarily by the transactional model of stress proposed by Lazarus and Folkman (1984). According to this perspective, psychological stress depends not simply on the objective presence of a demand but on how the individual appraises the demand and evaluates available coping resources.

For a Twelfth-Grade student, an examination may therefore be appraised as a manageable challenge by one student and as a threatening situation by another. Academic achievement, parental expectations, peer comparison, career uncertainty, and examination demands may all contribute to students' appraisal of their academic circumstances.

This theoretical perspective supports the need to examine psychological stress empirically rather than assuming that academic achievement alone determines students' psychological experiences.

3. Research Gap

The review of existing literature indicates several gaps.

First, much of the available empirical literature on academic stress among Indian students has been conducted in locations outside Kerala. Educational expectations, school environments, family structures, and cultural contexts may vary across regions.

Second, many studies have focused specifically on academic stress, examination anxiety, parental pressure, or mental health. Comparatively less attention has been given to examining **psychological stress in relation to academic achievement** among Twelfth-Grade students.

Third, Twelfth grade represents a particularly important educational stage because students simultaneously face board examinations, decisions regarding higher education, career planning, and expectations concerning future achievement.

Fourth, there is a need to examine whether psychological stress varies according to characteristics such as gender, school management, and academic stream within the Kerala educational context.

Finally, there is limited district-specific evidence concerning the relationship between academic achievement and psychological stress among Twelfth-Grade students in Thiruvananthapuram.

The present study seeks to address these gaps by examining academic achievement and psychological stress among a stratified sample of 390 Twelfth-Grade students in Thiruvananthapuram district.

4. Conceptual Framework

The conceptual framework of the study assumes that academic achievement and psychological stress are distinct but potentially related dimensions of students' educational experiences.

Academic Achievement ↔ Psychological Stress

The study also considers selected background variables:

- Gender: Boys / Girls
- School Management: Government / Aided / Unaided
- Academic Stream: Science / Commerce

The relationship between academic achievement and psychological stress is treated as an **association rather than a causal relationship**, because the study adopts an ex-post facto design.

The conceptual framework is therefore represented as:

Academic Achievement ↔ Psychological Stress

Selected characteristics:

Gender | School Management | Academic Stream

5. Objectives of the Study

1. To assess the levels of academic achievement and psychological stress among Twelfth-Grade students in Thiruvananthapuram district.
2. To examine the relationship between academic achievement and psychological stress among Twelfth-Grade students.
3. To examine differences in psychological stress among Twelfth-Grade students with respect to gender, school management, and academic stream.
4. To examine differences in academic achievement among Twelfth-Grade students with respect to gender, school management, and academic stream.

6. Hypotheses

The following null hypotheses will be tested at the 0.05 level of significance:

H01: There is no significant relationship between academic achievement and psychological stress among Twelfth-Grade students.

H02: There is no significant difference in psychological stress among Twelfth-Grade students based on gender, school management, and academic stream.

H03: There is no significant difference in academic achievement among Twelfth-Grade students based on gender, school management, and academic stream.

H04: There is no significant relationship between academic achievement and the selected academic and demographic characteristics of Twelfth-Grade students, wherever correlational analysis is appropriate.

7. Methodology

7.1 Research Approach

The study adopts a quantitative research approach.

7.2 Research Design

An ex-post facto research design is employed because the variables of interest occur naturally and are not manipulated by the researcher. The design is appropriate for examining naturally occurring associations and group differences.

Because no experimental manipulation is undertaken, statistically significant relationships identified in the study will be interpreted as associations and not as evidence of causation.

7.3 Population

The population comprises Twelfth-Grade students studying in higher secondary schools in Thiruvananthapuram district, Kerala. The study population is approximately 33,000 students. Official district-level statistics reported 33,282 higher-secondary students enrolled in Thiruvananthapuram during 2023–24, providing close empirical support for the population estimate used in the study.

7.4 Sample

The proposed sample consists of 390 Twelfth-Grade students.

Table 1

Proposed Distribution of the Sample

Variable	Category	Number
Gender	Boys	195
	Girls	195
School management	Government	132
	Aided	132
	Unaided	126
Academic stream	Science	200
	Commerce	190
Total		390

The sample is designed to provide representation across gender, school management, and selected academic streams.

7.5 Sampling Technique

Multi-stage stratified random sampling is employed. Schools are stratified according to school management and relevant academic characteristics. Students are subsequently selected from the identified strata.

7.6 Variables

Major variables

- Academic achievement
- Psychological stress

Selected background variables

- Gender
- School management
- Academic stream

7.7 Instruments

Standardized instruments will be used for assessing psychological stress. Academic achievement will be assessed using an appropriate academic performance indicator.

Important publication requirement: The final submitted version should identify each instrument by its exact official title, developer/author, year, number of items, response format, scoring procedure, reliability, validity, and evidence for suitability for the target population.

7.8 Data Collection Procedure

Necessary institutional permission and ethical clearance will be obtained before data collection. The selected schools will be approached, and eligible students will be invited to participate voluntarily.

Participants will be informed regarding the purpose of the study, voluntary participation, confidentiality, and the academic use of the information collected. Appropriate parental/guardian consent and student assent procedures will be followed for participants below the age of legal consent, in accordance with institutional and ethical requirements.

Primary data collection is currently in progress.

7.9 Statistical Analysis

The primary data will be analysed using SPSS.

The proposed statistical procedures include:

- Frequency and percentage
- Mean
- Standard deviation
- Pearson product-moment correlation
- Independent-samples t-test
- One-way ANOVA

The final selection of tests will be based on the measurement characteristics of the variables and relevant statistical assumptions.

8. Findings

8.1 Findings from Prevailing Educational Data

Because primary data collection for the proposed sample of 390 students is ongoing, the present section reports **secondary findings** from official educational statistics. These data provide the educational context within which the present investigation is situated.

8.1.1 Higher Secondary Enrolment in Thiruvananthapuram

According to the Kerala Economic Review 2024, **33,282 students** were enrolled in higher secondary schools in Thiruvananthapuram during 2023–24. Of these, 16,327 were boys and 16,955 were girls. The district-level figures included students from government, aided, and unaided institutions.

Table 2

Higher Secondary Enrolment in Thiruvananthapuram District, 2023–24

School management	Boys	Girls	Total
Government	7,603	8,413	16,016
Aided	7,243	6,395	13,638
Unaided	1,481	2,147	3,628
Total	16,327	16,955	33,282

Source: Directorate of Higher Secondary Education, as reported in *Economic Review 2024*, Government of Kerala.

The data demonstrate that the district has a substantially higher-secondary student population and that both male and female students are represented across government, aided, and unaided educational institutions.

8.1.2 Higher Secondary School Structure in Thiruvananthapuram

The same official source reports **178 higher-secondary schools** in Thiruvananthapuram district in 2024: 79 government schools, 55 aided schools, and 44 unaided schools. The district had 628 higher-secondary batches, comprising 366 Science, 124 Humanities, and 138 Commerce batches.

Table 3

Higher Secondary Schools and Batches in Thiruvananthapuram, 2024

Indicator	Government	Aided	Unaided	Total
Higher secondary schools	79	55	44	178
Science batches	—	—	—	366
Humanities batches	—	—	—	124
Commerce batches	—	—	—	138
Total batches				628

Source: Directorate of Higher Secondary Education, *Economic Review 2024*.

The distribution demonstrates the substantial scale and diversity of the higher-secondary educational environment in the district. It also supports the relevance of considering school management and academic stream when examining students' psychological experiences.

8.1.3 Kerala Higher Secondary Examination Outcomes

Official state-level Higher Secondary examination statistics provide an additional contextual indicator of academic performance.

Table 4

Kerala Higher Secondary Examination: Students Appeared, Passed, and Pass Percentage

Academic year	Students appeared	Students passed	Pass percentage
2019–20	376,962	320,940	85.14%
2020–21	375,061	329,780	87.93%
2021–22	362,676	303,966	83.81%
2022–23	377,952	313,382	82.92%
2023–24	374,755	294,888	78.69%

Source: Directorate of Higher Secondary Education, Government of Kerala, as reproduced in *Economic Review 2024*, Appendix 6.1.19.

The secondary data show that the state-level Higher Secondary pass percentage varied over the five-year period. It increased from 85.14% in 2019–20 to 87.93% in 2020–21 and subsequently declined to 78.69% in 2023–24. Thus, the pass percentage in 2023–24 was 6.45 percentage points lower than in 2019–20. These figures describe educational outcomes at the state level and should not be interpreted as indicators of psychological stress.

8.2 Findings from Previous Empirical Studies

The present study is further supported by findings from previous empirical research.

Table 5

Selected Empirical Findings Relevant to the Present Study

Study	Participants/context	Major finding
Deb, Strodl, & Sun (2014)	400 students from private secondary schools in Kolkata	Academic stress and examination anxiety were examined in relation to socioeconomic and study-related factors.
Deb, Strodl, & Sun (2015)	190 students from Grades 11 and 12 in Kolkata	63.5% reported academic stress; 66.0% reported parental pressure; 81.6% reported examination-related anxiety.
Rentala et al. (2019)	314 adolescent girls in Dharwad	Educational stress was associated with several personal, family, and educational characteristics.
Bedewy & Gabriel (2015)	University students	Academic workload, expectations, and examinations emerged as important dimensions of perceived academic stress.
Pascoe, Hetrick, & Parker (2020)	Review of student stress literature	Academic stress was associated with difficulties involving learning, motivation, psychological health, sleep, and well-being.
Compas et al. (2017)	212 studies; 80,850 participants	Coping and emotion regulation were associated with psychological outcomes in children and adolescents.

The findings of these studies indicate that academic pressure and stress among adolescents and students are multidimensional phenomena involving academic demands, parental expectations, examination concerns, personal characteristics, and coping processes.

8.3 Summary of Findings

The secondary evidence produces three important observations.

First, Thiruvananthapuram has a substantially higher secondary student population, with 33,282 students enrolled during 2023–24.

Second, the district has a diverse higher-secondary educational structure encompassing government, aided, and unaided schools and Science, Humanities, and Commerce streams.

Third, previous empirical research indicates that academic pressure, parental expectations, examination anxiety, and other educational demands are important psychological concerns among Indian adolescents and students.

Taken together, these findings establish the relevance of investigating psychological stress among Twelfth-Grade students. However, they do **not** establish a statistical relationship between academic achievement and psychological stress in the proposed Thiruvananthapuram sample. That relationship will be examined using the primary data currently being collected.

9. Discussion

The secondary findings provide an important contextual basis for the present study. The enrolment of 33,282 students in higher secondary education in Thiruvananthapuram during 2023–24 indicates that a substantial adolescent population is participating in an educational stage characterized by examinations, academic progression, and future-oriented decision-making.

The district's higher-secondary system includes government, aided, and unaided institutions and multiple academic streams. Such diversity is important because educational experiences may differ according to institutional context, academic stream, and students' individual circumstances. Consequently, the present study's inclusion of school management and academic stream as selected variables is methodologically justified.

The state-level examination data show considerable annual variation in Higher Secondary pass percentages, with the 2023–24 pass percentage standing at 78.69%. These statistics cannot be interpreted as evidence of psychological stress. Nevertheless, they illustrate the importance attached to measurable academic outcomes within the higher secondary educational system.

Previous empirical research provides stronger direct evidence concerning students' psychological experiences. Deb et al. (2015), for example, reported that nearly two-thirds of the students in their Kolkata sample experienced academic stress and that examination-related anxiety was also highly prevalent. These findings are relevant to the present study because the students under investigation are also in the senior secondary stage.

The findings of Rentala et al. (2019) further demonstrate that academic stress may be associated with a combination of personal, family, and educational characteristics rather than a single factor. This supports the present study's decision to consider gender, school management, and academic stream.

The theoretical perspective of Lazarus and Folkman (1984) suggests that psychological stress depends upon individual appraisal and coping rather than solely on the objective presence of academic demands. Therefore, a student's academic achievement may not have a uniform relationship with psychological stress. High-achieving students may experience pressure to maintain their performance, whereas students experiencing academic difficulties may experience stress associated with fear of failure or uncertainty regarding future opportunities.

Accordingly, the central empirical question of the present study cannot be answered using secondary educational statistics alone. Primary data from the selected sample of 390 students are necessary to determine whether academic achievement and psychological stress are significantly related in the Thiruvananthapuram context.

10. Primary Data Analysis Plan

Primary data collection is currently in progress. After completion of data collection, the following analyses will be conducted.

Table 6

Planned Analysis of Primary Data

Objective	Variable/focus	Statistical procedure
Objective 1	Academic achievement and psychological stress	Mean, SD, frequency and percentage
Objective 2	Relationship between academic achievement and psychological stress	Pearson product-moment correlation
Objective 3	Psychological stress by gender, school management, and stream	Independent-samples t-test and one-way ANOVA
Objective 4	Academic achievement by gender, school management, and stream	Independent-samples t-test and one-way ANOVA

Where appropriate, assumptions underlying parametric procedures will be examined before conducting inferential analyses.

The final empirical manuscript will report the relevant descriptive and inferential statistics, including means, standard deviations, correlation coefficients, test statistics, degrees of freedom, and p-values.

11. Implications

11.1 Implications for Students

The study may help students recognise the importance of balancing academic goals with psychological well-being. Awareness of stress, effective coping, time management, realistic academic goals, and help-seeking may contribute to healthier educational experiences.

11.2 Implications for Parents

Parents may benefit from greater awareness of the distinction between supportive academic encouragement and excessive performance pressure. The findings may encourage parents to combine academic expectations with emotional support and realistic communication regarding educational and career choices.

11.3 Implications for Teachers

Teachers can play an important role in identifying signs of excessive academic stress. Supportive classroom practices, realistic feedback, encouragement, and appropriate referral to counselling services may help students manage academic demands.

11.4 Implications for School Counsellors

School counsellors may use the findings to identify students who are vulnerable to academic stress and to develop preventive programmes focusing on coping skills, examination anxiety, emotional regulation, study skills, and career decision-making.

11.5 Implications for Educational Planners

The findings may provide evidence for strengthening school-based counselling, student well-being programmes, stress-management interventions, and systematic psychological support during the higher secondary stage.

12. Limitations

The study has several limitations.

1. The ex-post facto design permits examination of naturally occurring associations but does not establish causality.
2. The study is geographically restricted to Thiruvananthapuram district; therefore, generalization to the whole of Kerala should be undertaken cautiously.
3. Psychological stress is influenced by multiple factors, including family circumstances, personality, peer relationships, school climate, coping resources, and socioeconomic conditions. The present study examines only selected variables.
4. Psychological measures may depend partly on participants' willingness and ability to report their experiences accurately.
5. The secondary educational statistics used in the present article provide contextual information but do not directly measure psychological stress.
6. Because primary data collection is ongoing, the present article does not report statistical findings from the proposed sample of 390 students.

13. Conclusion

Academic achievement and psychological stress are important dimensions of the educational experiences of adolescents, particularly during the Twelfth-Grade stage. The higher secondary period is characterized by examinations, academic expectations, competition, parental aspirations, and decisions concerning higher education and career pathways.

The present study focuses on Twelfth-Grade students in Thiruvananthapuram district, Kerala, and proposes to examine the relationship between academic achievement and psychological stress using an ex-post facto research design.

Secondary educational evidence establishes the substantial scale of the higher-secondary student population in the district, with 33,282 students enrolled during 2023–24 and 178 higher-secondary schools reported in 2024. State-level examination statistics also demonstrate variation in Higher Secondary pass percentages over recent years, including a pass percentage of 78.69% in 2023–24.

Previous empirical studies further demonstrate that academic pressure, parental expectations, examination anxiety, and other educational demands are important concerns among Indian adolescents. These findings provide a strong rationale for investigating psychological stress in relation to academic achievement in the Thiruvananthapuram context.

However, secondary data cannot answer the principal research question of whether academic achievement is significantly related to psychological stress among the selected students. That question requires primary empirical evidence. Therefore, the final conclusions concerning the proposed hypotheses will be drawn only after completion of primary data collection and statistical analysis.

The study has potential significance for students, parents, teachers, school counsellors, and educational planners. Understanding the relationship between academic achievement and psychological stress may contribute to a more balanced approach to educational achievement in which academic performance and psychological well-being are considered together.

References

1. Bedewy, D., & Gabriel, A. (2015). Examining perceptions of academic stress and its sources among university students: The Perception of Academic Stress Scale. *Health Psychology Open*, 2(2), 1–9. <https://doi.org/10.1177/2055102915596714>
2. Compas, B. E., Jaser, S. S., Bettis, A. H., Watson, K. H., Gruhn, M. A., Dunbar, J. P., Williams, E., & Thigpen, J. C. (2017). Coping, emotion regulation, and psychopathology in childhood and adolescence: A meta-analysis and narrative review. *Psychological Bulletin*, 143(9), 939–991. <https://doi.org/10.1037/bul0000110>
3. Deb, S., Strodl, E., & Sun, J. (2014). Academic-related stress among private secondary school students in India. *Asian Education and Development Studies*, 3(2), 118–134. <https://doi.org/10.1108/AEDS-02-2013-0007>
4. Deb, S., Strodl, E., & Sun, J. (2015). Academic stress, parental pressure, anxiety and mental health among Indian high school students. *International Journal of Psychology and Behavioral Sciences*, 5(1), 26–34. <https://doi.org/10.5923/j.ijpbs.20150501.04>
5. Folkman, S., & Lazarus, R. S. (1985). If it changes it must be a process: Study of emotion and coping during three stages of a college examination. *Journal of Personality and Social Psychology*, 48(1), 150–170.
6. Government of Kerala, State Planning Board. (2025). *Economic Review 2024, Volume II*. Thiruvananthapuram, Kerala. Directorate of Higher Secondary Education data, Appendices 6.1.17–6.1.19.

7. Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal, and coping. Springer.
8. Pascoe, M. C., Hetrick, S. E., & Parker, A. G. (2020). The impact of stress on students in secondary school and higher education. *International Journal of Adolescence and Youth*, 25(1), 104–112. <https://doi.org/10.1080/02673843.2019.1596823>
9. Rentala, S., Nayak, R. B., Patil, S. D., Hegde, G. S., & Aladakatti, R. (2019). Academic stress among Indian adolescent girls. *Journal of Education and Health Promotion*, 8, 158. https://doi.org/10.4103/jehp.jehp_116_19