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Academic stress and associated sociodemographic variables: A study of pre-university students in Karnataka, India

Shreemathi S. Mayya, Arun Mayya[1], Maxie Martis[2], Vani Lakshmi R

Department of Data Science, Prasanna School of Public Health, Manipal Academy of Higher Education, Manipal, Karnataka, India, [1]Department of Conservative Dentistry and Endodontics, A J Institute of Dental Sciences, Mangaluru, Karnataka, India, [2]Nursing College, All India Institute of Medical Sciences, Bhopal, Madhya Pradesh, India

Address for correspondence:
Dr. Shreemathi S. Mayya, Department of Data Science, Prasanna School of Public Health, Manipal Academy of Higher Education, Manipal - 576 104, Karnataka, India.
E-mail: shreemathi.mayya@manipal.edu

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Abstract:

BACKGROUND: Academic stress is a predominant phenomenon among grade 11 and 12 students. The performance in Grade 12 is important for entry to higher education programs in India. The purpose of the study was to assess the magnitude of the perceived academic stress and identify the main stressors and the sociodemographic variables associated with the perceived academic stress among adolescents enrolled in the science stream in coastal Karnataka.

MATERIALS AND METHODS: Upon Institutional Ethical Committee approval, a cross-sectional survey was carried out among pre-university students (science stream) of coastal Karnataka during February–April 2021. The study used Manipal Inventory of Academic Stress (MIAS) scale to collect data on perceived academic stress from 1859 students (response rate 68.3%). Stratified cluster sampling method was used to collect data from the study participants. IBM Statistical Package for the Social Sciences (SPSS) 26.0 was used to analyze the data. Descriptive statistics, unpaired *t*-test, one-way analysis of variance (ANOVA), and multiple linear regression analyses were used to study the association between academic stress and various demographic variables.

RESULTS: The study revealed that 28% of the Grade 11 students and 26% of the Grade 12 students experienced high or extreme stress. The significant stressors were lack of time for revision, queries from neighbors or relatives, and parental expectations on academic performance. Gender, residence, and the medium of instruction until Grade 10 were associated with academic stress.

CONCLUSION: Measures at the institutional and national levels are necessary to reduce the academic stress in higher secondary education. The integrated curriculum proposed in the National Educational Policy 2020 addresses a few stressors identified in this study.

Keywords:

Academic stress, adolescence, India, parental expectations, pre-university

Introduction

Adolescence, a transitional phase to adulthood, is a time of "storm and stress" and is marked by greater vulnerability to mental illness.[1,2] While the magnitude, intensity, and frequency of these changes differ, the methods and techniques adopted by adolescents within the context of their support system describe the adolescents' mental health status. Intense and frequent negative effects commonly experienced during those times may increase the prevalence of psychosocial problems, suicidal ideations/suicides, or even accidental death.[2,3] Thus, identifying adolescents with stress, the stressors experienced by them, and the factors associated with stress is a preliminary step to reduce the burden of mental illness among the young population.

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Formal education is an essential component of the early phase of life and is directed toward the overall holistic development of the pupil.[4] Formal education prepares for systematic exploration of realities and solutions to the current problems of life of both the self and the society. While the experience in learning should be meaningful and joyous, several studies in India report academic pressure as a significant source of stress among adolescents and young adults.[3,5-18] Academic stress is a body's response to the demands, anticipated frustrations, or failure (or even an unawareness of such losses) surrounding the academic endeavors (current or future).[18,19] Academic stress appears to be intensive in higher secondary education, for the academic performance at this level is the basis for admission to a career-oriented program of choice.[18,20] Anxiety, withdrawal, loss of concentration, anger, and somatic problems are the typical reactions of adolescents to academic stress.[16,17]

A few factors within the social environment (home, school, and the neighborhood) are the sources of academic stress. Fear of falling behind with coursework or academic standards, finding the motivation to study, homework, time pressure and time management worries, financial worries, and concerns over grades primarily increase the academic pressure. Academic stress heightens with uncontrollable events such as family events, relocation, accidents events, difficulties in romantic relationships, negotiating parental and peer influences, exposure to violence, and other threats to personal safety.[16-18] Further, the competitive environment across the institutions, families, communities, and the role-based demands, many of which are inconsistent or undefined, are the sources of academic stress.[21]

The study of academic stress is essential in the Indian context, given that India's adolescent population (10–19 years) is 253 million, which accounts for 20.9% of the total country's population.[22] The southern Indian states share similar cultures and are educationally advanced in India.[23] Karnataka is one of the southern states where the private sector dominates the educational facilities. The three districts (Dakshina Kannada, Udupi, and Uttara Kannada) top the lists regarding students' academic performance in higher secondary education, the number of colleges, and quality education.[23]

The school atmosphere is the most feasible approach for assessing and intervening in adolescent health in India. Studies in India reveal that stress among students in the science stream is higher than in commerce and art streams.[3,8] Hence, the investigators were interested in assessing the prevalence of stress, identifying the stressors, and the factors associated with it among the learners of science stream in the coastal region of Karnataka, India. This will serve as an enabler for the policymakers at the regional and institutional levels to take appropriate measures to ensure adolescent health.

Materials and Methods

Study design and setting

The present study used a cross-sectional (correlational design) survey among pre-university students enrolled in science stream in the coastal region of Karnataka, India.

Study participants and sampling

The sampling technique used in the study was a stratified (district-wise) cluster (schools) sampling. The participants were pre-university students enrolled in science stream in the coastal region of Karnataka. Assuming that 50% of the participants experience stress, the study would require a sample size of 769 in each grade for estimating the expected proportion with 5% absolute precision and 95% confidence with stratified cluster sampling technique (design effect = 2).[24] The suggested sample size for multiple regression is $n > 50 + 8m$ (where m is the number of independent variables), assuming a moderate effect size.[25] In the present study, more than 800 students participated from each grade, which is adequate to maintain 80% power.

Data collection tool and technique

An unpublished tool, namely, the Manipal Inventory of Academic Stress (MIAS) (submitted for Copyright, Government of India, Diary Number: 6593/2020-CO/L), along with a demographic proforma was used to obtain data on perceived academic stress. MIAS is a five-point Likert type of rating scale with 19 items with the following response choices: no stress (1), slight stress (2), moderate stress (3), high stress (4), and extreme stress (5). Scores were interpreted as "higher the scores, more is the stress." Further, MIAS has one open-ended item (please specify other stressors, if any). Demographic proforma included age, gender, grade, type of family (nuclear/joint) and institution (government/private), literacy status (of mother and father), medium of instruction till grade 10, enrollment for tuition (yes/no), current residence, and number of siblings.

Twelve experts from different areas validated the content of MIAS. An item was included in the scale if more than 80% of the validators confirmed its relevance.[26] In the case of MIAS, at least 10 of the 12 experts agreed upon the relevance of the items included. The internal consistency reliability of the scale was assessed from the data collected in this study. Based on Cronbach's α of 0.90 (n = 1853), MIAS has shown high internal consistency. A minimum value of 0.7 is recommended for a scale to be deemed reliable.[27]

Data were collected from 34 schools (10 from Udupi district and 12 each from Dakshina Kannada and Uttar Kannada), which were convenient to visit. The sample included 50% public and 50% private schools in each district. A total of 2720 parents were approached for consent, and 1859 responded positively (response rate 68.3%).

Owing to the coronavirus disease 2019 (COVID-19) pandemic, the schools were closed for more than a year. Classes were held online till February 2021. The study was carried out between February and April 2021 after obtaining the required administrative permission from the Deputy Director of Pre-University Colleges (DDPU) of each district and the educational institution. Data collection involved a minimum of two visits to the institution. During the first visit, the investigators explained the study to the head of the institution and two faculty. The investigators sought the faculty's assistance to distribute and receive the two documents, namely, "information for parents" and "informed consent form." The information for parents included the objective and importance of the survey, the funding agency, the project director, the investigators, and the institution carrying out the survey. The consent form stated voluntary participation, and confidentiality of information was assured. The principal investigator or research assistant explained the details of the study to the students, who were requested to give the information to their parents for their consent and return the signed consent form to the designated faculty. The questionnaire was administered to the students during the second visit upon receipt of the signed consent form from the parents.

Ethical consideration

The Institutional Ethics Committee approved this study (IEC 414/2019 dated 12.06.2019). The procedures followed were in accordance with the ethical standards of the institutional ethics committee on human experimentation and with the Helsinki Declaration of 1975 (revised in 2000). The researchers have obtained the parents'/students' consent/assent before the voluntary participation of the students.

Statistical analysis

IBM Statistical Package for the Social Sciences (SPSS) 26.0 for Microsoft Windows was used to conduct data analysis associated with the present study. Data were summarized by computing percentages, mean, standard deviation (SD), and quartiles. The investigators used unpaired *t*-test, one-way analysis of variance (ANOVA), and multiple regression analyses to study the association between academic stress and various demographic variables.

Results

Characteristics of the participants

The study participants belonged to the age group 15–19 years. The mean (SD) age of Grade 11 students was 16.26 (0.58) and Grade 12 students was 17.09 (0.54). Of the 1859 participants, 1020 (55%) were from Grade 11 and 839 (45%) were from Grade 12. The number of male and female students enrolled in the study was 682 (36.7%) and 1177 (63.3%), respectively. Twenty-six and 21 participants did not provide information about the father's and mother's education, respectively. A complete response to all items of MIAS was available for 1853 (99.7%) participants.

Distribution of academic stress score

Table 1 shows the summary of the academic stress score distribution. The SD and observed score range reveal a good spread of scores.

Prevalence of academic stress

Twenty-fifth, 50th, 75th, and 90th percentiles of the score distribution of the combined group score were used to categorize the stress as "mild stress," "moderate stress," "high stress," and "extreme stress." Table 2 provides the score range across the four categories. The majority of the participants had moderate stress. A quarter of the participants were in either high stress or extreme stress in grades 11 and 12.

Identification of major academic stressors

The item-wise percentage of the combined group experiencing high or extreme stress was computed

Table 1: Descriptive statistics - academic stress score

	Grade 11	Grade 12	Combined group
n	1017	836	1853
Mean	46.62	47.08	46.83
SD	14.47	14.02	14.27
Minimum	19.	19.	19
Maximum	86	89	89
First quartile (Q1)	35	37	36
Median	46	46	46
Third quartile (Q3)	57	56	57
90th percentile	66	67	66

SD=standard deviation

Table 2: Grade-wise stress category and academic stress score

Stress category	Score range	Grade 11		Grade 12	
		Count	Percentage	Count	Percentage
Mild	19-35	260	25.6	182	21.8
Moderate	36-55	475	46.7	438	52.4
High	56-65	172	16.9	121	14.5
Extreme	66 and above	110	10.8	95	11.4
Total		1017	100	836	100

and arranged in descending order to identify the major stressors [Table 3]. Lack of time for revision, academic queries from neighbors or relatives, parents' expectations about performance, and lack of time for cocurricular activities or hobbies topped the list of stressors. The ranking of the stressors was similar among students of both grades. Based on an analysis of the text content in the answers to the open-ended item in MIAS, the researchers grouped common phrases and computed the frequency of the phrases. A descriptive summary of the same is presented in Table 4.

Demographic variables associated with academic stress

To identify the variables associated with academic stress, the mean academic stress score was calculated across categories of various demographic variables with the help of a two-sample *t*-test or one-way ANOVA method. Multiple linear regression was used to identify the variables associated with academic stress score, adjusting for the influence of other variables. Tables 5 and 6 present the univariate and the multiple regression analysis results, respectively. Gender ($P < 0.001$), current residence ($P = 0.012$), medium of instruction till Grade 10 ($P = 0.006$), and the type of institution ($P = 0.019$) were found to be associated significantly with academic stress. The mean stress score was higher among students from private institutions, among male students, students staying away from parents (hostel or other), and when the medium of instruction was English till their Grade 10. However, the type of institution ($P = 0.121$) did not show a significant association when adjusted for the influence of other variables, as observed in Table 6.

Discussion

The present study supports the findings of previous studies that academic stress is prevalent among the higher secondary students in the coastal region[3,5,6] and a few studies from Karnataka.[20,28] However, the majority experienced a moderate stress level in the science stream.[17,20] A few studies point out that stress motivates productivity.[29] However, there is no clarity on the level of academic stress that motivates better academic performance. For instance, a study based out of Andhra Pradesh indicated that the life skills of high school students with moderate stress were higher than those with high or very high academic stress.[15] Another study stated that the beneficial effects of a moderate level of stress need to be explored in the context of academia.[30] At the same time, there is a need to focus on students who experience high or extreme stress, as several studies highlight the association of stress with negative outcomes such as psychosomatic illness, accidents, and suicides.[2,3,20,28] Furthermore, in the present study, male students, students living in hostel, and those with previous education in English medium were associated with academic stress. Hence, the stakeholders need to implement a focused intervention mechanism for this group of students, giving them high priority.

Parental pressure and academic queries from the neighborhood were the major sources of stress in the present study. The findings mentioned above must be seen in amalgamation with the demographic and sociocultural aspects while charting out a comprehensive plan toward the wellness of the adolescents. In the

Table 3: Item-wise distribution of students experiencing high or extreme stress

Academic stress scale items	Grade 11 (*n*=1017)		Grade 12 (*n*=836)		Combined group (*n*=1853)	
	Count	Percentage	Count	Percentage	Count	Percentage
Lack of time for revision	388	38.2	329	39.4	717	38.7
Academic queries from neighbors or relatives	356	35.0	281	33.6	637	34.4
Parents' expectations about academic performance	351	34.5	267	31.9	618	33.4
Lack of time for cocurricular activities or hobbies	309	30.4	245	29.3	554	29.9
The exam syllabus is very vast	321	31.6	220	26.3	541	29.2
Hectic school timetable	244	24.0	195	23.3	439	23.7
Lack of concentration during studies	259	25.5	179	21.4	438	23.6
Too frequent class tests	197	19.4	194	23.2	391	21.1
Fear of failure in exams	222	21.8	161	19.3	383	20.7
Competitive learning environment	212	20.8	160	19.1	372	20.1
Friends discuss on the extent of revision before exams	190	18.7	174	20.8	364	19.6
Distractions due to social media	196	19.3	162	19.4	358	19.3
Confusing study material	179	17.6	154	18.4	333	18.0
Lack of fluency in English	185	18.2	139	16.6	324	17.5
Lack of guidance to prepare for the exam	174	17.1	140	16.7	314	16.9
Hesitation to get help from teachers	176	17.3	117	14.0	293	15.8
Poor interest in a few subjects	152	14.9	96	11.5	248	13.4
Financial difficulties	124	12.2	113	13.5	237	12.8
Pressure from teachers for better results	125	12.3	108	12.9	233	12.6

Table 4: Response to open-end questions - other stressors

Stressors to grade 11 and 12	Stressors specific to grade 12
(stressors to at least 10% of the students)	(stressors to at least 10% of the students)
Fear of COVID-19	Inability to discuss academics with parents
Excessive homework	Poor time management in the exams
Misunderstandings in relationships with friends	Pressure from family members to study when it is difficult to concentrate
Forgetting what is studied while writing the exam	Lack of training in study techniques
Online classes and network problem	Competitive entrance examinations for higher education
Excessive online reading	
Uncertainty about exam dates	
Inadequate teaching	
Other stressors (<5%) to grade 11 and 12	Stressors to 5%-10% of the students
Transportation problems	Medium of instruction (English)
Giving punishment to the whole class for the mistake of a single student	Self-preparation of notes
	Addiction to mobile gaming
Family-related issues	Teachers are comparing marks
Teacher's involvement in personal matters	Thinking about future
	Difficulty in understanding the subjects
Partiality of teachers	
Poor health condition	

COVID-19=coronavirus disease 2019

Table 5: Demographic variables associated with academic stress

Variables	*n*	Mean	SD	*t*/*F*	*P*
Gender					
Male	678	48.84	14.24	4.630	<0.001*
Female	1175	45.67	14.16		
Grade					
Grade 11	1017	46.62	14.47	−0.703	0.482
Grade 12	836	47.08	14.02		
Current residence					
Parent's home	1714	46.59	14.18	−2.500	0.012*
Hostel or other	139	49.73	15.01		
Medium of instruction till Grade 10					
English	1168	47.52	14.81	2.747	0.006*
Other	685	45.64	13.23		
Whether enrolled for tuition					
Yes	585	47.51	14.78	1.404	0.160
No	1268	46.51	14.02		
Type of family					
Nuclear	1395	46.47	14.16	−1.903	0.057
Joint	458	47.93	14.56		
Father's education					
Grade 4 and below (primary)	231	47.76	14.04	2.014	0.110
Grade 5-8 (middle school)	418	45.89	13.97		
Grade 9-12 (High school)	840	47.36	14.37		
Graduation or postgraduation	344	45.73	14.14		
Mother's education					
Grade 4 and below (primary)	234	45.74	14.05	2.323	0.073
Grade 5-8 (middle school)	475	46.94	14.07		
Grade 9-12 (high school)	833	47.52	14.48		
Graduation/postgraduation	296	45.26	13.84		
Number of siblings					
Zero	222	47.64	15.11	0.426	0.653
One	1016	46.67	14.23		
Two or more	615	46.79	14.02		
Type of college					
Government	713	45.85	13.19	2.340	0.019*
Private	1140	47.44	14.88		

*Significant at 5% level

traditional collectivistic and patriarchal society, the parenting style is primarily authoritative. Parental control is often considered an expression of parental involvement and care. Obedience to elders (e.g., parents and teachers), interdependence, family obligations, and sociability (between parents, children, as well as the kith and kin) are valued.[31-33] Conservatism and safety issues do not promote female child's participation in education or the labor market.[21] Females in India are subservient to males and are primarily expected to involve in household chores, homeschooling of children/siblings, and meeting the needs of significant others.[32] Traditionally, male children are considered strong and powerful breadwinners and are expected to take responsibility for the family.[34] An Indian study reports gender differences in the cognitive and physical domains of academic stress (wherein the mean scores in these domains of females were higher, indicating higher stress), reflecting the nature of gender-oriented rearing of children in traditional Indian families.[15] While children's achievement is a source of pride for parents in most cultures,[33] the achievement of the male child is a well-celebrated phenomenon in the Indian culture.[34]

Further, the family is a major support system in Indian culture. Thus, staying away from family (in a hostel or other rented accommodations) is a stress factor for the child and the family.[35] Queries from neighborhood or relatives, hesitancy in meeting the teachers, discussion by friends on the extent of revision, and parental and teachers' expectations for better performance also reflect the region's culture and denote interdependence and respectful socialization. However, traditional societies of India are slowly adapting to the changes in the modern social environment, but parental control and interdependence still prevail. The involvement of parents in the academic atmosphere is still an accepted best solution. A study in India among college students reports that parent–teacher meetings brought positive changes in parents.[36] Parents encouraged teachers to involve their children in extracurricular activities and even made an effort to help their children study positively.[37]

Lack of time for revision and lack of time for extracurricular activities reflect the fact that learners in

Table 6: Multiple linear regression to identify variables associated with academic stress

Model	Unstandardized coefficients		*t*	*P*	95% Confidence interval for β	
	β	Std error			Lower bound	Upper bound
(Constant)	48.846	1.973	24.759	<0.001*	44.977	52.715
Gender (male)	3.073	0.687	4.475	<0.001*	1.726	4.420
Grade 12	0.177	0.673	0.263	0.792	−1.142	1.496
Residing with parents	−3.429	1.254	−2.735	0.006*	−5.888	−0.970
Medium of instruction till Grade 10 (English)	1.737	0.768	2.263	0.024*	0.232	3.243
Enrolled for tuition (yes)	0.575	0.769	0.749	0.454	−0.932	2.083
Type of family (nuclear)	−1.407	0.766	−1.836	0.066	−2.911	0.096
Father's education						
Grade 5-8 (middle school)	−2.191	1.191	−1.840	0.066	−4.527	0.144
Grade 9-12 (high school)	−1.393	1.142	−1.220	0.222	−3.632	0.846
Graduation or postgraduation	−2.472	1.413	−1.750	0.080	−5.244	0.299
Mother's education						
Grade 5-8 (middle school)	1.810	1.168	1.549	0.122	−0.482	4.101
Grade 9-12 (high school)	1.553	1.174	1.323	0.186	−0.749	3.856
Graduation/postgraduation	−0.895	1.498	−0.597	0.550	−3.833	2.043
Number of siblings						
One sibling	−0.667	1.076	−0.619	0.536	−2.777	1.444
Two or more siblings	−0.313	1.153	−0.272	0.786	−2.575	1.949
Type of college (private)	1.174	0.756	1.553	0.121	−0.309	2.657

*Significant at 5% level

the science stream are engaged in learning for longer hours without sufficient time for relaxation. The vast syllabus, hectic time schedules at school, homework load, frequent class tests, and confusing study materials consume a significant portion of the time, leaving less room for cocurricular or extracurricular activities and, probably, even self-care. Further, much of the learning materials or communication concerning academia are exchanged through social media during the current times, responding to which is itself a time-consuming process. Studies document the influence of time pressure in academia as a source of stress. The cumulative effect of stressors outside one's control, especially lack of time for revision/extracurricular activities, parental, neighbor's, and teacher's expectations for better performance, competitive environments, and financial difficulties may even result in a steep rise in the intensity of stress. Thus, both collective and individual attention is required to reduce academic stress. Training on time management skills and refining the educational environment with less-frequent exams (or even alteration in the methods of assessment/regular formative assessment); use of effective practical-oriented teaching methodologies; slowing the pace of teaching–learning for better comprehension of the facts; reducing the syllabus or teaching the critical components in a lesson; emphasis on cocurricular (or extracurricular) activities; lesser record work/homework; time allotment in the academic plan for revision of lessons, providing simple and comprehensive study materials and facilities for counseling and guidance (including career guidance and preparing for examinations); and ensuring supportive and trustworthy pupil–teacher relationships, so that students do not hesitate to approach for guidance may be beneficial.[14,26] The stressors that originated due to the COVID-19 pandemic were both unique and global.[11,13]

A relevant and unique finding in this study is that despite the majority of the participants having studied in schools where the medium of instruction was English, their stress was higher than others. Lack of fluency in the English language was perceived as one of the stressors in literature. English as a subject is introduced in Grade 5 in the state-run public schools in Karnataka. The subject is usually taught by teachers who are non-native English speakers. The course materials, teaching–learning activities, and assessments in the science stream are in the English language. English is not the primary language in India, and communication in social environments is usually in the local language. Lack of fluency also represents difficulties in comprehension and communication in the English language, resulting in fear of examinations. Learners thus require more time to read, comprehend, or evaluate information to be grasped.[7] The selection of teachers involved in teaching in pre-university colleges should be such that they have a better grasp and command of the English language. Moreover, they must possess the ability to make the teaching enjoyable and effective for the student community.

Studies conducted in the coastal region reveal that most adolescents and young adults adopt positive adaptive strategies.[5,10] However, a few measures at the institutional level are also necessary. Placement of

counselors for screening for academic stress and guidance and counseling or assigning these responsibilities to teachers without causing work overload could be an option available for the administrators of the educational institutions. The teaching of English subjects at the primary education level may be improved with better teaching techniques. Further, since an individual moves across the continuum of life (during which some contextual factors may change), assessing stress levels at regular intervals may provide a better picture of how an individual moves across the life span against a stressor. Timely guidance can be provided, especially when the stress levels are high or extreme. Reforms at all levels of education are currently drafted and approved in India. They address the learner's holistic development, foster the capabilities of each student, and place teachers at the heart of the teaching–learning process. There is an emphasis on life skills, ethics and values, multidisciplinarity, multilingualism (including a focus on local language), flexibility, and regular formative assessment.[4]

The sociodemographic features of the adolescents enrolled in the science stream in the coastal Karnataka region demonstrate a move toward the modern culture and the educational empowerment of women. A higher number of students studied till their Grade 10 in English medium (most of which are private enterprises, and the cost of education is comparatively high in the private sector with the medium of instruction as English), which informs that the communities in the region understand the importance of learning the English language, despite the cost factor. Lesser enrollment for tuition/coaching may reflect the emphasis on self-directed learning or homeschooling by the literate parents or may even be a matter of additional cost to some parents. Nevertheless, the traditional concern for the safety of the girls cannot be undermined. A higher number of adolescents belonging to nuclear families living with one sibling depicts that the region is slowly departing from the traditional joint family culture. The pressure to excel in academics in the present times may also be a reflection of the literate parents' awareness of the competitive educational environment as well as the difficulties in getting a seat for higher studies, or their aspiration for better socioeconomic status, recognition, and fulfillment of their unrealized dreams, which they wish to own through their children.[7]

Limitation and recommendation

This cross-sectional study considers a large sample of participants pursuing pre-university education in science stream in the coastal region of Karnataka, and hence, the findings reflect the stress factors of the underlying population of interest. However, it is pertinent to note that the present study was conducted during the second wave of the COVID-19 pandemic and the perceived academic stress observed among the student community could be affected by the pandemic itself.

The study recommends training on time management and stress reduction skills, incorporating cocurricular activities in the curriculum and orienting parents on reducing stress among the children. The study also suggests measures at the institutional and the national level to reduce the academic stress in higher secondary education. The study suggests a holistic stress management mechanism at institutional level specific to adolescents, which can translate to national policy.[20,38]

Conclusion

Academic stress is prevalent among pre-university students, and the perception of stressors is almost similar among grade 11 and 12 students of the science stream. The major stressors were lack of time for revision and cocurricular activities, queries from neighbors and relatives, and parental expectations for better performance. Gender, place of residence, and the medium of instruction at primary education were associated with academic stress. The stressors of Indian adolescents should be interpreted in the context of one's development and the social environment in which they live. The measures at the government level must be framed with a focus on the holistic development of the individual.

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Conflicts of interest

There are no conflicts of interest.

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