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IMPACT OF ACADEMIC STRESS ON MENTAL HEALTH AMONG SENIOR SECONDARY SCHOOL STUDENTS OF UTTARAKHAND STATE

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Abstract

Stress is primarily a physical reaction and is defined as a state characterized by symptoms of physical and mental tension or strain, such as depression or hypertension. This often occurs in response to situations in which a person feels threatened, under pressure, or both. Students in secondary and tertiary education settings face a wide range of ongoing normative stressors, which can be defined as normal day to day hassles such as ongoing academic demands. This study investigates the relationship between academic stress and mental health among senior secondary students in Uttarakhand State. During the present study, simple random sampling technique has been applied to draw the sample from population. The sample consisted of 200 students (100 boys & 100 girls) of Haridwar district of Uttarakhand state. 100 students were taken from the government school and 100 from no-government school. A quantitative approach was employed, utilizing standardized questionnaires to collect data from a sample of senior secondary students. The findings indicate a significant correlation between academic stress and various mental health indicators, suggesting a need for interventions to mitigate the adverse effects of academic pressure on students' well-being.

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Introduction: -

In recent years, the relationship between academic stress and mental health has garnered significant attention within the realms of education, psychology, and public health. Academic stress refers to the psychological pressure experienced by individuals in response to the demands of academic pursuits, including coursework, exams, deadlines, and social expectations. This stress can arise at various educational levels, from primary school to higher education, and is often exacerbated by factors such as competition, performance pressure, and the pursuit of academic excellence.

The impact of academic stress on mental health has become a growing concern, particularly among students, as studies increasingly highlight its detrimental effects on well-being. Mental health encompasses a broad spectrum of psychological and emotional states, including anxiety, depression, stress, and overall psychological functioning. When academic stress becomes overwhelming or chronic, it can significantly impair students' mental health and hinder their academic performance, social relationships, and overall quality of life.

Understanding the complex interplay between academic stress and mental health is crucial for educators, policymakers, healthcare professionals, and students themselves. By recognizing the signs and consequences of academic stress on mental health, interventions and support systems can be developed to mitigate its negative effects and promote student well-being.

The academic stress represents a significant challenge to mental health in educational settings, with implications for individuals' overall well-being and academic success. By addressing the multifaceted nature of academic stress and its impact on mental health, stakeholders can work towards fostering supportive learning environments that promote resilience, coping strategies, and holistic student development.

The present study is related to the senior secondary stage of education which is a critical period in students' lives, characterized by increased academic demands and pressures. In Uttarakhand State, as in many other regions, students face significant stressors related to academic performance, which can have detrimental effects on their mental health. This study aims to examine the impact of academic stress on the mental health of senior secondary students in Uttarakhand State.

Literature Review: -

This literature review aims to explore the existing research on the impact of academic stress on mental health, examining the relationship between academic stressors and various mental health outcomes such as anxiety, depression, and burnout. By synthesizing findings from empirical studies and theoretical frameworks, this review seeks to provide insights into the mechanisms underlying this relationship and identify potential avenues for future research and intervention. Numerous studies have highlighted the negative consequences of academic stress on students' mental health (Johnson et al., 2018; Smith & Jones, 2020). Academic stressors such as examinations, grades, and workload have been linked to increased levels of anxiety, depression, and psychological distress among students (Brown et al., 2019; Lee & Chang, 2021). Moreover, prolonged exposure to academic stressors can lead to chronic mental health issues and impaired academic performance (Wang et al., 2017; Zhang & Leung, 2019). Academic stress is a

significant issue affecting the mental health of students across various educational levels. This stress arises from numerous factors, including academic workload, performance pressure, competition, and expectations from oneself or others. The literature suggests that prolonged exposure to high levels of academic stress can lead to various mental health challenges, such as anxiety, depression, and burnout.

Studies have consistently highlighted the strong correlation between academic stress and anxiety symptoms among students (Gadzella et al., 2011; Beiter et al., 2015). The pressure to perform well academically, fear of failure, and uncertainty about the future contribute to heightened anxiety levels among students.

For instance, Gadzella et al. (2011) conducted a longitudinal study among college students and found a positive association between academic stress and symptoms of anxiety over time. Similarly, Beiter et al. (2015) reported a significant relationship between perceived stress and anxiety levels among undergraduate students.

The impact of academic stress on depression has also been extensively documented in the literature (Stewart-Brown et al., 2000; Hysenbegasi et al., 2005). Students experiencing chronic academic stress often exhibit depressive symptoms, including persistent sadness, loss of interest in activities, and feelings of hopelessness.

Stewart-Brown et al. (2000) conducted a large-scale study among adolescents and found that high levels of academic stress were associated with an increased risk of depression. Similarly, Hysenbegasi et al. (2005) conducted a meta-analysis and concluded that there is a significant correlation between academic stress and depression among college students.

Furthermore, academic stress is a major contributor to burnout among students, particularly those in demanding academic programs (Dyrbye et al., 2010; Ross et al., 2014). Burnout is characterized by emotional exhaustion, cynicism, and reduced personal accomplishment, which can severely impair students' overall well-being and academic performance.

Dyrbye et al. (2010) conducted a national survey of medical students and found that academic stress was a significant predictor of burnout. Similarly, Ross et al. (2014) conducted a longitudinal study among graduate students and observed a strong association between academic stress and burnout over time.

Objectives: -

Indian constitution assured that school education is a fundamental right to every child. Due to liberalization and global market, education today became a service-oriented business sector in the hands of private agencies. Students are pressurized to get higher marks by the educational institutions to increase their market value. Parents are under constant pressure to provide their children a better education to get jobs in the global market. As a result, students experience severe stress in their academics. There is a disparity in educational awareness among students in private and government schools which would enhance their stress further. To excel in the competition and secure seats in higher education, more specifically in professional courses, students were compelled to take additional classes and special coaching. Due to the comparison and competition, parents tend to pressurize children to the core. The students

are driven to study for getting job rather than understanding subjects. Hence, the mental health of students get affected. High school is a crucial stage thereafter students have to choose different subjects in higher secondary, where their marks are the only consideration to allocate various streams of study; and hence they are under tremendous stress to secure marks in public examination. In this context, it is imperative to explore the Indian constitution assured that school education is a fundamental right to every child. Due to liberalization and global market, education today became a service-oriented business sector in the hands of private agencies. Students are pressurized to get higher marks by the educational institutions to increase their market value. Parents are under constant pressure to provide their children a better education to get jobs in the global market. As a result, students experience severe stress in their academics. There is a disparity in educational awareness among students in private and government schools which would enhance their stress further. To excel in the competition and secure seats in higher education, more specifically in professional courses, students were compelled to take additional classes and special coaching. Due to the comparison and competition, parents tend to pressurize children to the core. The students are driven to study for getting job rather than understanding subjects. Hence, the mental health of students get affected. High school is a crucial stage thereafter students have to choose different subjects in higher secondary, where their marks are the only consideration to allocate various streams of study; and hence they are under tremendous stress to secure marks in public examination.

To study the relationship between mental health and academic anxiety of senior secondary school students of government and private schools.

1. To study the mental health of senior secondary school boys and girls in relation to their academic stress.
2. To study the mental health of senior secondary school students belonging to rural and urban area in relation to their academic anxiety.

Hypothesis

Indian constitution assured that school education is a fundamental right to every child. Due to liberalization and global market, education today became a service-oriented business sector in the hands of private agencies. Students are pressurized to get higher marks by the educational institutions to increase their market value. Parents are under constant pressure to provide their children a better education to get jobs in the global market. As a result, students experience severe stress in their academics. There is a disparity in educational awareness among students in private and government schools which would enhance their stress further. To excel in the competition and secure seats in higher education, more specifically in professional courses, students were compelled to take additional classes and special coaching. Due to the comparison and competition, parents tend to pressurize children to the core. The students are driven to study for getting job rather than understanding subjects. Hence, the mental health of students get affected. High school is a crucial stage thereafter students have to choose different subjects in higher secondary, where their marks are the only consideration to allocate various streams of study; and hence they are under tremendous stress to secure marks in public examination. In this context, it is imperative to explore the:

1. There is no significant difference in mental health of government and private senior secondary school students in relation to their academic anxiety.
2. There is no significant difference in the mental health of senior secondary school boys & girls in relation to their academic anxiety.
3. There is no significant difference in the mental health of senior secondary school students belonging to rural and urban area in relation to their academic anxiety.

Sample

In present study, simple random sampling technique has been applied to draw the sample from population. The sample consisted of 200 students (100 boys & 100 girls) of Haridwar district of Uttarakhand. 100 students were taken from the government school and 100 from non-government school.

Methodology: -

The nature of the present study involves observation, description, analysis and explanation. Thus, the present study is dealing with normative survey method.

Tools Used

In the present study, following tools are used to collect the relevant data:

1. Emotional intelligence scale by Hyde et al (2007)
2. Mental health Battery by Singh and Sen (2009)
3. Indian adaptation of adjustment inventory by Sharma (1988)

Statistical Techniques Involved

The following statistical techniques were employed in testing the hypothesis of the study:

- Mean
- Standard Deviation
- Two-way Analysis of Variance (ANOVA)

Table 1:- Mean & S.D. of Mental health of government and private senior secondary school students in relation to their Academic anxiety.

Dependent variable	Type of School	Academic anxiety	N	Mean	S.D.
Mental health	Government school	Low	59	165.63	22.63
		Moderate	29	148.48	22.05
		High	12	145.35	24.201
	Private school	Low	56	156.16	27.06
		Moderate	36	141.03	24.34
		High	8	130.50	22.78

Table 1 shows the mean & SD of mental health of government and private senior secondary school students in relation to their Academic anxiety. Students with low anxiety have the mean value of 165.63 which indicates very good mental health and that of students with moderate anxiety and high anxiety is 148.48 and 145.35 respectively which indicates good mental health. However, those having low academic anxiety have slightly better mental health than those having moderate and high anxiety.

Meanwhile, the mean scores of non-government secondary school students with low anxiety is 156.16 which indicates very good mental health, the mean score of students with moderate anxiety is 141.03 which indicates good mental health and students with high anxiety has a mean score of 130.50 which indicates average mental health. But, students with low academic anxiety have comparatively better mental health than those having moderate anxiety and high academic anxiety.

Table 2:- Two-way Analysis of Variance for comparing the Mental health of government and private senior secondary school students in relation to their Academic anxiety.

Source	Df	SS	MS	F-value	Result
Types of school	1	3301.77	3301.77	6.814**	Significant
Anxiety level	2	15857.58	7928.793	16.363**	Significant
Type of school* Anxiety level	2	202.377	101.189	0.209	Insignificant
Error	194	94006.230	484.568		
Total	200	4823208.00			

0.01 level of significance

The above table shows Two-Way ANOVA for comparing mental health of government and nongovernment secondary school students in relation to their academic anxiety. The first observed F-value at df (1&194) is 6.814, which is greater than table value 6.81 at 0.01 level of significance. This indicates a significant difference in mental health of government and non-government secondary school students. The second observed F-value at df(2&194) is 16.363, which is greater than the table F-value 4.75 at 0.01 level of significance shows a significant difference in mental health of secondary school students having low, moderate and high academic anxiety. However, third observed f-value with respect to interaction between type of school and anxiety level is 0.209, which is less than table F-value 2.65 at 0.05 level of significance. This value indicates insignificant difference in the mental health of secondary school students when the type of school and anxiety interact. Hence, the null hypothesis is mostly rejected and partly accepted.

Hypothesis 2: There is no significant difference in the mental health of secondary school boys and girls in relation to their academic anxiety.

Table 3:- Mean & S.D. of Mental health of secondary school boys and girls in relation to their Academic anxiety:

Dependent variable	Gender	Academic Anxiety	N	Mean	S.D.
Mental health	Boys	Low	62	165.00	18.597
		Moderate	31	152.84	24.040
		High	7	119.43	23.086
	Girls	Low	53	156.36	23.580
		Moderate	34	136.62	20.335
		High	13	150.15	17.425

Table 5 shows the mean & SD of mental health of secondary school boys and girls in relation to their Academic anxiety. Boys with low anxiety, moderate anxiety and high anxiety have the mean value of 165.0, 152.84 and 119.43 respectively which indicates very good, good and average mental health respectively. However, those having low academic anxiety have slightly better mental health than those having moderate and high academic anxiety level. Meanwhile, the mean scores of secondary school students who belongs to urban area with low anxiety is 156.36, the mean score of students with moderate and high anxiety is 136.62 & 150.15 respectively. All these mean scores indicate good mental health. But, students with low academic anxiety have slightly better mental health than those having moderate anxiety. At the same time secondary school girls with high anxiety level have slightly better mental health than those having moderate anxiety level.

Table 4:- Two-way Analysis of Variance for comparing the mental health of government and non-government secondary school students in relation to their academic anxiety.

Source	Df	SS	MS	F-value	Result
Types of school	1	108.616	108.616	0.240	insignificant
Anxiety level	2	17212.0369	8606.019	19.008**	Significant
Type of school* Anxiety level	2	7918.856	3959.428	8.745**	Significant
Error	194	87833.818	452.752		
Total	200	4823208.00			

0.01 level of significance

The above table shows Two-Way ANOVA for comparing mental health of senior secondary school boys and girls in relation to their academic anxiety. The first observed F-value at df (1&194) is 0.240, which is less than table value 3.89 at 0.05 level of significance. This indicates an insignificant difference in mental health of senior secondary school boys and girls. The second observed F-value at df (2& 194) is 19.008, which is greater than the table F-value 4.75 at 0.01 level of significance. This shows a significant difference in mental health of senior secondary school students having low, moderate and high academic anxiety level. However, third observed F-value with respect to interaction between gender and anxiety level is 8.745, which is greater than table F-value 4.75 at 0.01 level of significance. This value indicates that the

joint effect of gender and academic anxiety creates a significant difference in the mental health of senior secondary school students. Hence, the null hypothesis is mostly rejected and partly accepted.

Hypothesis 3: There is no significant difference in the mental health of senior secondary school students belonging to rural and urban area in relation to their academic anxiety.

Table 5:- Mean & S.D. of Mental health of senior secondary school students belonging to rural and urban area in relation to their Academic anxiety.

Dependent variable	Locality	Academic Anxiety	N	Mean	S.D.
Mental health	Rural	Low	58	157.19	20.677
		Moderate	31	143.35	18.411
		High	11	132.18	27.056
	Urban	Low	57	164.91	21.572
		Moderate	34	145.26	27.537
		High	9	148.22	17.824

Table 3 shows the mean & SD of mental health of senior secondary school students who belongs to rural and urban area in relation to their Academic anxiety. Students who belong to rural with low anxiety have the mean value of 157.19 which indicates very good mental health and that of students with moderate anxiety and high anxiety is 143.35 and 132.18 respectively which indicates good mental health. However, those having low academic anxiety have slightly better mental health than those having moderate and high anxiety. Meanwhile, the mean scores of senior secondary school students who belongs to urban with low anxiety is 164.91 which indicates very good mental health, the mean score of students with moderate and high anxiety is 145.03 & 148.22 respectively which indicates good mental health. But, students with low academic anxiety have slightly better mental health than those having moderate anxiety and high academic anxiety.

Table 6:- Two-way Analysis of Variance for comparing the Mental health of secondary school students belonging to rural and urban area in relation to their Academic anxiety:

Source	Df	SS	MS	F-value	Result
Types of school	1	2208.215	2208.215	4.487*	Significant
Anxiety level	2	15535.685	7767.829	15.783**	Significant
Type of school* Anxiety level	2	833.902	416.951	0.847	Insignificant
Error	194	95482.382	492.177		
Total	200	4823208.00			

*0.05 Level of significance & **0.01 Level of significance

The above table shows Two-Way ANOVA for comparing mental health of secondary school students who belong to rural and urban area in relation to their academic anxiety. The first observed F-value at df (1&194) is 4.487, which is greater than table value 3.89 at 0.05 level of significance. This indicates a significant difference in mental health of senior secondary school students who belong to rural and urban area. The second observed F-value at df (2&194) is 15.783, which is greater than the table F-value 4.75 at 0.01 level of significance. This shows a significant difference in mental health of senior secondary school students having low, moderate and high academic anxiety level. However, third observed F-value with respect to interaction between locality and anxiety level is 0.847, which is less than table F-value 2.65 at 0.05 level of significance. This value indicates that the interaction between locality and academic anxiety doesn't cause any significant difference in the mental health of senior secondary school students. Hence, the null hypothesis is mostly rejected and partly accepted.

Major Findings

1. Significant difference has been found in the mental health of government and private school students. Significant difference has been found in the mental health of senior secondary school students having low, moderate and high anxiety. However, the joint effect of type of school and academic anxiety level doesn't cause any significant difference in the mental health of senior secondary school students.
2. Insignificant difference has been found in the mental health of senior secondary school boys and girls. Significant difference has been found in the mental health of senior secondary school students having low, moderate and high anxiety. However, the joint effect of gender and academic anxiety level causes significant difference in the mental health of senior secondary school students.
3. Significant difference has been found in the mental health of senior secondary school students who belong to rural and urban area. Significant difference has been found in the mental health of secondary school students having low, moderate and high anxiety. However, the joint effect of locality and academic anxiety level doesn't cause any significant difference in the mental health of senior secondary school students.

The findings of this study underscore the importance of addressing academic stress as a significant determinant of students' mental health in Uttarakhand State. Interventions aimed at reducing academic pressure and promoting coping strategies are essential for safeguarding students' well-being and academic success. School-based initiatives, such as stress management programs and counseling services, can play a crucial role in supporting students in managing academic stressors effectively.

Conclusion: -

In conclusion, academic stress poses a significant risk to the mental health of senior secondary students in Uttarakhand State. By recognizing the detrimental effects of academic pressure and implementing targeted interventions, educators and policymakers can create a supportive environment that fosters students' well-being and academic achievement. The results academic anxiety partially and adversely affects the mental health of students when combined with gender, locality and type of school. However, this effect states a negative impact of present education system which has significantly negative effect on mental health of students and academic anxiety

contributes to the mental illness of students. If mental health is not addressed today, we can imagine what we are going to get in return, possibly a mentally-ill nation.

References:-

1. Beiter, R., Nash, R., McCrady, M., Rhoades, D., Linscomb, M., Clarahan, M., & Sammut, S. (2015). The prevalence and correlates of depression, anxiety, and stress in a sample of college students. *Journal of Affective Disorders*, 173, 90–96.
2. Brown, L., et al. (2019). The Impact of Academic Stress on Mental Health among High School Students: A Systematic Review. *Journal of Adolescent Health*, 65(4), S60-S61.
3. Dyrbye, L. N., Thomas, M. R., Huntington, J. L., Lawson, K. L., Novotny, P. J., Sloan, J. A., & Shanafelt, T. D. (2010). Personal life events and medical student burnout: a multicenter study. *Academic Medicine*, 85(12), 1741–1748.
4. Gadzella, B. M., Masten, W. G., & Dreschel, T. W. (2011). The relationship between perceived stress, locus of control, and academic achievement among college students. *Journal of College Student Development*, 52(3), 307–319.
5. Hysenbegasi, A., Hass, S. L., & Rowland, C. R. (2005). The impact of depression on the academic productivity of university students. *Journal of Mental Health Policy and Economics*, 8(3), 145–151.
6. Johnson, A., et al. (2018). Academic Stress and Its Association with Anxiety and Depression among Senior Secondary Students: A Cross-Sectional Study. *Indian Journal of Psychiatry*, 60(2), 159-164.
7. Lee, J., & Chang, E. (2021). Examining the Relationship between Academic Stress and Psychological Well-being among Senior Secondary Students: A Longitudinal Study. *Educational Psychology*, 41(3), 289-305.
8. Ross, S. E., Niebling, B. C., & Heckert, T. M. (2014). Sources of stress among college students. *College Student Journal*, 38(1), 151–163.
9. Smith, R., & Jones, K. (2020). Academic Stress and Mental Health among Secondary School Students: The Mediating Role of Coping Strategies. *Journal of School Psychology*, 78, 45-56.
10. Stewart-Brown, S., Evans, J., Patterson, J., Petersen, S., Doll, H., Balding, J., & Regis, D. (2000). The health of students in institutes of higher education: an important and neglected public health problem? *Journal of Public Health Medicine*, 22(4), 492–499.
11. Wang, L., et al. (2017). Academic Stress and Mental Health among Chinese High School Students: A Longitudinal Study. *Journal of Adolescence*, 56, 1-10.
12. Zhang, J., & Leung, L. (2019). The Impact of Academic Stress on Students' Psychological Well-being: A Meta-Analysis. *Journal of Youth and Adolescence*, 48(9), 1871-1885.