



A Comparative Study on Academic Performance and Academic Stress among Students appearing and not appearing for Board Exams

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Abstract: The present environment is full of ambiguity and stress owing to cutthroat competitions and rapid growth. The students face pressure to meet up with academic demands and parental expectations, additionally deal with psychological challenges. Stress is indeed a driving force behind growth and learning however excess of it not only results in personal and psychological issues but also poor academic achievement. The present study aimed to investigate the relationship between academic stress and academic performance among students appearing for board examination compared to their non-board counterparts. A total sample of 150, (75 board appearing students and 75 non-board students) were taken. The Academic Stress scale and Academic Performance questionnaire were used as scales to conduct the study. The results revealed that academic stress is negatively correlated with academic performance. Additionally, students appearing for board exams reported higher exam stress and classroom stress in comparison to non-board counterparts. On the other hand, no significant difference was seen in terms of academic performance. The results emphasize the importance of managing academic stress to improve the academic performance of students. Further research must be done to understand other factors which must be responsible for increased academic stress among board appearing student's vs non board students. Furthermore, introduction of stress management trainings and wellness programs to improve overall wellbeing of students.

Keywords: *Adolescence, Academic stress, Academic Performance*

1. Introduction

As per WHO adolescents age range is 10-20 years marking a period between childhood and adulthood, however, there exist a lot of discrepancy around the correct age range of adolescence; from when it starts and where it ends. In 20th century Stanley Hall defined adolescents “as the period between 14-24 years while UN defined adolescence 10-19 years of age” (Sawyer et al., 2018). Adolescence is the period which prepares every individual to face adulthood. During adolescence the common developmental tasks includes adapting with bodily changes, forming interpersonal skills, becoming emotionally stable, developing identity and finding life philosophy all of it is crucial to successfully function as an adult (Crockett & Crouter, 2014). Adolescence of 21st century is living in the era of complex technological and societal changes. The current shift in the academic demands and parental expectations have impacted adolescents’ socio-emotional development, emphasizing continuous adaptation. Hence, the role of family members, teachers and counselors have become more significant in fostering supportive environments which provides space for open communication and support their wellbeing (Pandey, 2025).

One of the key challenges faced by them is how to cope up with academic stress, excessive societal demands and evolving dynamics of education has built up immense pressure on students causing mental health challenges. Multiple studies have highlighted that self-reported stress leads to mental health concerns such as anxiety, depression, concentration problem, inability to complete school tasks etc. Not only this higher academic stress also leads to substance use and poor sleep in adolescents (Pascoe et al., 2020). According to Swayer et al. (2012) academic related stress is compromising adolescents physical and mental health, as it is period where they develop many behavior patterns; positive and negative hence, it is crucial to equip them with adequate coping strategies. Similarly, the Organization for Economic Co-operation and Development (OECD, 2015) asserted that schools or educational institutes are the places where students learn interpersonal and emotional skills which are significant to thrive the challenges of life. Examination stress has debilitating effects on students’ academic performance; even the most intelligent student makes mistakes especially during board exams (Jamuna, 2017).

The purpose of the present study is to determine the relationship between academic stress and academic performance. The study also aimed to find out if there exists a difference in academic stress and academic pressure faced by students appearing for board exams in contrast to not appearing. Thus, emphasizing the role of educational systems, primary care givers, mental health

professionals in providing robust support systems to students for effective coping with the stress which is depreciating their academic performance as well. The findings of the study will be helpful in highlighting the significance of early introduction of stress management techniques for adolescents to overcome the current challenges in education.

Academic Stress

Stress is defined as the state of tension or emotional strain caused due to outside factors such as novel situations, tough tasks and other's actions which goes beyond individuals' capacity to deal. Academic stress is major concern. According to Selye stress is a "nonspecific set of reactions to extrinsic or intrinsic stimuli which interfere with usual academic activities" (Selye, 1936). Academic stress is a mental distress that arises due to awaited academic challenges or fear of academic failure. In academic journey the stressors may arise from any aspects present in students' environment, school, friendship, neighborhood or home. It is found that dropout rate drastically increases after first board examination in grade tenth as the competition here advances from school level to national level (K & D, 2020).

Stress is unavoidable part of everybody's life. Academic stress hampers the performance of students, and they end up making wrong decisions due to it. There are multiple coping strategies used by students to cope up with high academic stress; avoidant coping, substance abuse, alcohol use, behavioral problems while others cope positively through planning, reframing, acceptance and take up the required steps to deal with it (Reddy et al., 2007; Sharma, 2017). Social support is regarded as one of the significant methods to deal with academic stress. In order to channelize the energy of students, parents play important role which prevents adolescents from engaging in deviant behavior. Hence, appropriate guidance must be given to students to help them resolve conflicts and make right decisions (Sharma, 2017).

Academic Performance

Academic performance is the level of student's advancement in an institution. It is usually calculated in terms of percentage or cumulative grade point average (CGPA) highlighting how adequately students were able to achieve immediate or long-term goals. The issue of academic achievement is most significant affecting schools and educational institutes, preventing them from offering quality education in appropriate manner. Due to poor academic performance student attrition has increased considerably in various institutes. Strong academic performance among

students in higher education institutions significantly contributes to their continued enrollment and retention within the university, provide job opportunities and resolves financial problems.

Recent research indicates that students with strong academic achievements tend to secure higher-paying jobs, enjoy better employment benefits, and access greater career advancement opportunities. Moreover, academically accomplished students often demonstrate enhanced self-esteem and confidence, experience lower levels of anxiety and depression, show stronger social engagement, and are less prone to substance abuse. Academic stress significantly impacts students' achievement. Concentration problems, psychological issues, physical problems, substance abuse, depreciating academic performance, low peer popularity are mostly observed concerns among students experiencing high academic stress. hence, effective management is crucial to help adolescents successfully transform into healthy adult (Kapali et al., 2019).

1.1 Purpose

The purpose is to study the relationship between academic performance and academic stress among students appearing for board exams vs not appearing.

1.2 Hypothesis

H1: Academic performance will have negative relationship with academic stress among students.

H2: There will be significant different between academic performance and academic stress of students appearing for board exams vs not appearing.

2. Method

2.1 Sample

The study sample 150 school students (75 board appearing and 75 not appearing) from a private school in Ghaziabad, Uttar Pradesh.

2.2 Measures

Academic Stress Scale (ASS): The Academic Stress of participants was measured using academic stress scale. The self-report scale was developed by Kumar et al., (2024). The scale is further divided into two dimensions exam stress and classroom stress. It is 5-point Likert scale with 30 items which include Strongly agree (1), Agree (2), Neutral (3), Disagree (4) and Strongly disagree (5).

Academic Performance Questionnaire (APQ): The Academic performance of participants was measured using academic performance questionnaire. The self-report scale was developed by Birchmeier et al., (2015). It is a 5-point Likert scale with 8 items with responses including Strongly agree (5), Agree (4), Neutral (3), Disagree (4) and Strongly Disagree (5).

2.3 Procedure

Purpose and objectives of the present study were explained to participants. They were told that confidentiality will be maintained, and the participation will be voluntary. The study consisted of standardized psychological test which assessed academic stress and academic performance compiled in a goggle form. Participants were requested to respond as accurately and truthfully as possible. Participants were thanked for their valuable time and cooperation.

3. Analysis of Data

3.1 Results

Table 1: N, Mean and Standard Deviation

	Exam Stress	Classroom Stress	Academic Performance
N	150	150	150
Mean	31.2	28.6	29.3
Median	30.0	28.0	29.0
Standard Deviation	9.77	7.75	4.13

Table 2: Correlation

	Exam Stress	Classroom Stress	Academic Performance
Exam Stress	—		
Classroom Stress	0.690***	—	
Academic Performance	-0.270***	-0.322***	—

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 3: Independent Sample T- test

		Statistic	df	p
Exam Stress	Student's t	3.03	148	0.003
Classroom Stress	Student's t	2.60	148	0.010
Academic Performance	Student's t	-1.27	148	0.207

Note. $H_a \mu_{Board} \neq \mu_{Non board}$

Table 4: Group Descriptives

	Group	N	Mean	Median	SD	SE
Exam Stress	Board	75	33.5	33.0	9.30	1.074
	Non board	75	28.8	28.0	9.72	1.123
Classroom Stress	Board	75	30.2	29.0	8.38	0.968
	Non board	75	27.0	26.0	6.75	0.779
Academic Performance	Board	75	28.9	29.0	3.91	0.451
	Non board	75	29.7	29.0	4.32	0.499

4. Discussion of Results

The primary purpose of the study was the analysis the relationship between academic stress and academic performance of students appearing for board examination bs non -board appearing students. Examination stress and classroom stress together explained academic stress in the study. The results indicate that there is strong positive relationship between examination stress and classroom stress ($r=0.690$, $p<0.001$), suggesting that higher classroom related stress also leads to higher examination stress. additionally, exam stress had significant negative relationship with academic performance ($r=0.270$, $p<0.001$) indicates that higher exam related stress tends to decrease academic performance. Similarly, classroom stress had significant negative relationship between academic performance ($r= 0.322$, $p<0.001$) implying that higher classroom stress depreciates academic performance.

The independent T-test results revealed that board appearing students had significantly high level of examination stress ($t=3.03$) and classroom stress ($t=2.60$), as compared to non-board students. However, there were no significant difference observed in terms of academic performance of board appearing student's vs not appearing. The findings confirm our hypothesis that academic stress will have negative relationship with academic performance and there will be significant difference in academic stress and academic performance of board and non-board appearing students. Kotter et al. (2017) conducted a study on 456 German medical students and found that academic stress led to poor academic performance. Similarly, another study on Hong Kong students ($N= 121$) reported high stress levels leads to poor academic performance (Stewart et al. 1999).

Similarly, Deng et al. (2022) conducted a study on (N=186) university students of Rawalpindi /Islamabad concluded that high level of academic stress leads to many negative effects like poor physical health, declining academic performance and depression. Several researchers Schimelpfening (2020); Pascoe et al. (2019); Bisson (2017) have examined the relationship between stress, depression, and academic performance, reporting that both stress and depression exert a negative impact on students' academic outcomes. In contrast, Aafreen, Priya and Gayathri (2018) presented differing findings, suggesting that stress can enhance cognitive alertness and reflexes, thereby enabling individuals to perform more effectively under challenging circumstances. Together these findings suggest that we need to keep a check on adolescent academic stress to improve their academic performance, also especial attention must be paid to students appearing in board exams and preventive care must be given to enhance learning outcome.

5. Conclusion

The present study investigated the relationship between academic stress and academic performance among students appearing for board exams vs not appearing. It was seen that examination stress is positively correlated with classroom stress. Also, examination stress and classroom stress were negatively correlated with academic performance highlighting that early signs of academic stress can be spotted directly in the classroom itself to prevent it from impacting examination results and overall performance of child. Furthermore, it was seen that board appearing students had relatively more examination stress and classroom stress as compared to non-board counterparts. By evaluating responses from 150 adolescents, 75 board appearing students and 75 non-board students at a private school in Ghaziabad, Uttar Pradesh, the present study emphasizes that learning outcomes can be improved by managing academic stress of school going children.

The results indicate the need of assistance and intervention strategies for school children and emphasis the need to review and reconsider our examination system to offer a stress-free classroom environment and to promote overall wellbeing of the child. The findings also offer an opportunity for schools and educational institutes to address students' emotional wellbeing and needs. Psychological support services are not present in multiple institutes, highlighting lack of importance paid to it by administrations. Hence, programs that constantly monitor and improve

students' mental health are crucial. Counselors and teachers should take up the responsibility for supporting and mentoring students it will enhance their learning and academic performance.

The study had few limitations. involving use of self-report measure, a small and focalized sample, also the data collection was done during exam period which could have possibly affected the reported stress levels. Even though the results were meaningful and substantial a longitudinal study must be conducted to effectively establish the relationship. Further research must be conducted to identify different sources of stress which precipitates academic stress in context of adolescents' lives.

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