

A study to find origin, combat and prevention of examination stress on students in educational System

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Abstract: It is a compelling need of time to look into the widespread problem of exam stress among students inside the educational system as numbers of students are committing suicide due to strain and stress across India. Stress is multidimensional and includes psychological and physical exam stress, time dimensional, examination mechanism, role of teacher and support from parents, etc. For better assessment of the stress and for better prevention, an efficient intervention and support systems must be operational. This study has attempted to coin such assessment and prevention system by cross-examining contemporary works at a variety of sources, including books, papers, and peer-reviewed journals. According to the study, exam stress affects students at all stages of their academic careers and is not limited to a certain age group or educational level. Long-term exam stress has been associated with negative psychological outcomes, such as sadness and anxiety. The necessity for supportive surroundings is highlighted by the role that parents and educators can play for preventing stress.

Keywords: Examination Stress, Educational System, Academic Performance, Mental Health.

1. Introduction

The word “stress” is used to describe circumstances that are challenging physically and emotionally (McEwen (2007) and Tsigos and Chrousos (2002)). The disadvantageous impact of stressors on various psychological and physiological outcomes is widely recognized in the literature (Djuric et al., 2008; Loft et al., 2007; Bibbey et al., 2013). These stressors not only influence task performance (LeBlanc, 2009; Arora et al., 2010) but also have significant consequences for an individual's overall health (Chida and Steptoe, 2010). The “academic stress” associated with exams is well recognized as a significant stressor that students encounter, which has the potential to negatively impact their academic performance (Park et al., 2012). Furthermore, it has been shown that this sort of stress can also have adverse effects on the mental well-being of students (Maercker et al., 2013; LeBlanc, 2009). Although everyone responds to stress in a different way psychosomatically, all of these acute stressful events have an impact on how the subjects perceive themselves i.e., subjective measurements or how they feel physically i.e., objective measures. In the latter scenario, an assessment can be made of the physiological alterations resulting from stress through the utilization of non-invasive biomarker measurements.

Specifically, attention can be directed toward examining the reactions stemming from. The study has observed following multi dimensional origin of the stress.

A. Higher Education System and Examination System in India

Economic and social progress depends on education. The higher education system creates wealth creators and leaders in many spheres, including business, professions, politics, administration, and creative endeavors (Putwain, & Pescod, 2018). On the other hand, many university graduates lack even the most basic knowledge, conceptual comprehension, or problem-solving abilities in their respective fields. Our higher education has been weakened by rote learning, a lack of knowledge application, and a subpar testing system. The enormous strain that college students endure as a result of the cruel competition for the fittest is another characteristic them (Ramirez, G., & Beilock, S. L. 2011). Although it's widely accepted that some exam stress is necessary for academic achievement, too much of it can occasionally cause students to experience psychological issues including anxiety, sadness, and examination phobia. The outdated and shameful assessment system for higher education is also to blame for the high degree of stress experienced during exams, in addition to student aspirations and family expectations. Rote learning and memory assessments are typically prioritized (Manjula, & Vijaylaxmi, (2012). Usually memorization of the solutions to the problems asked is always tested. However some analytical skills, knowledge applicability, problem-solving capabilities, and creative thinking are seldom tested in the workplace. The need for ongoing evaluation is not stressed, and just one final exam is used to evaluate the student's performance. The material covered in class and what is tested conflict entirely. It makes sense that the instructor of the course would be the best person to assess a student's performance. But under the existing system, the student's exam is graded by a disinterested assessor who is located elsewhere! (Wong, et al. 2006). Tragically, intelligent, aspirational, and industrious Indian students are just doing what the system requires of them. This need is being met by the whole school system, including the numerous coaching institutions. If the type of demand is changed, the infrastructure and the students involved will adjust to the new circumstances and boost supply. There are several test designs for successfully assessing pupils and stimulating the desire for higher education by redefining success (Kumari, & Jain, 2014).

B. Academic-related stress and mental health

According to a comprehensive analysis of 13 research, greater levels of self-reported stress are connected to worsened quality of life and well-being among students (Ribeiro et al., 2017). According to research by Moylan et al. (2013) and Kessler (1997), ongoing stress can also lead to the emergence of more severe mental health conditions including depression and anxiety. According to studies by Eisenberg, et al. 2007, Ozen, et al. 2010, and Bayram & Bilgel (2008), anxiety can affect up to 35% of tertiary students, while depression affects 30% of them (Ibrahim, et al. 2013). According to several studies (Dantzer, 2012; Dantzer, et al. 2011, Maes, 2008),

stress and depression, and anxiety are inversely correlated. Major stressful life experiences are among the greatest indicators that depression will develop (Kendler et al., 1995; Kessler, 1997). Therefore, severe life stresses repeatedly occur before the initial symptoms of despair in youthful people (Lewinsohn et al. 1999). Sadness and nervousness indications might adversely affect academic success in addition to affecting general health and well-being (Bernal-Morales, et al. 2015). Higher levels of self-reported anxiety and depressive symptoms were associated with worse exam results were associated among American undergraduate university students with higher levels of self-reported anxiety and depression symptoms (Chapell et al., 2005; Hysenbegasi, et al., 2005). A longitudinal study of secondary school students in Hawaii found a connection between early self-reported depressive symptoms and subsequent poor academic performance. (Kessler, 2012; McArdle, et al., 2014).

C. Academic-related stress and achievement

To effectively engage in education, students must be in good physical and mental health, as per “the World Health Organization” (World Health Organisation, 1996). In fact, according to the aforementioned OECD assessment, stress related to homework, academics, and testing has a detrimental effect on student’s academic performance in science, mathematics, and reading. Top-performing females state that their performance on exams is frequently disrupted by their anxiety about making errors, according to the poll (OECD, 2015). Students who report having the lowest academic success report feeling far more worried than students who claim to have the highest academic achievement. Despite their preparation, up to 63% of students in the lowest-performing quarter of science report feeling apprehensive before examinations (OECD, 2015). On the other hand, a lot of the kids in the top quarter claim to feel this way. This shows that worse academic performance is linked to higher perceived stress levels. According to earlier studies, both happy and negative emotions have a direct impact on how engaged students are in class (Reschly et al. 2008). Positive feelings during class were more common among American students in Grades 7 through 10, and this association was shown to be accompanied by greater levels of participation.

According to the research mentioned above, academic stress is a significant factor influencing academic progress for secondary and postsecondary students. Academic success is likely to be worse among students who perceive stress as being higher (Pascoe, et al. 2020).

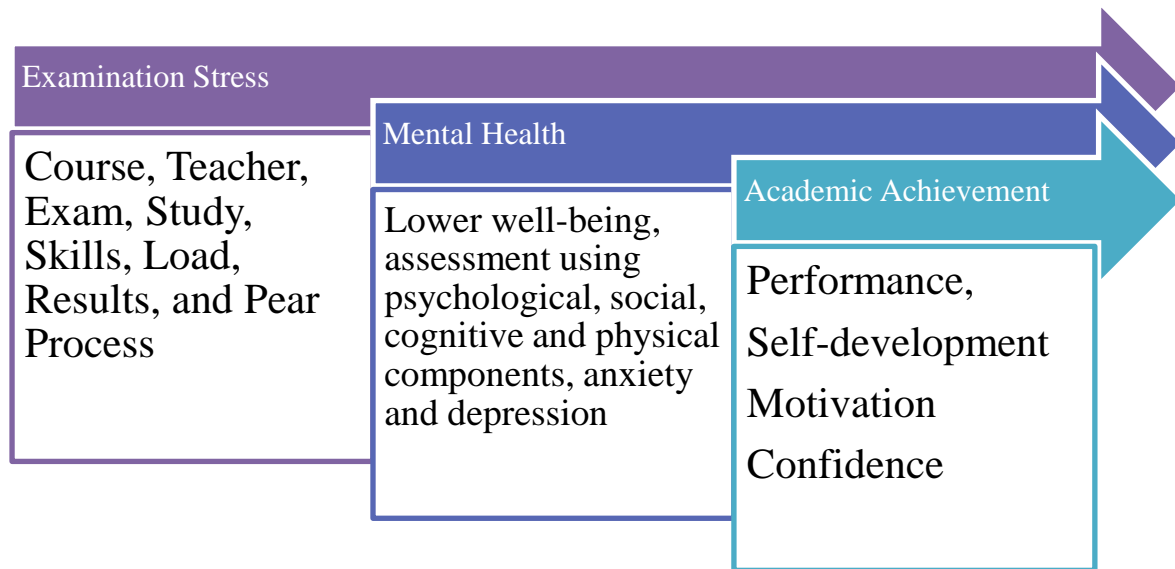


Figure 1: Impact of Examination Stress on Mental Health and Academic Achievement

(Source: Self-Preparation of Authors)

2. Literature Review

Conducting a comprehensive literature evaluation is an essential component of any research endeavor. The researcher will derive advantages from possessing knowledge regarding the issues that previous studies have prioritized and the aspects that they have neglected. The study by Reddy et al. (2018) found no connection between academic streams and stress levels. There are nonetheless institutional, social, and individual approaches to managing stress. Numerous methods, such as psychotherapy, yoga, life skills instruction, mindfulness, meditation, and the feedback approach, are beneficial in lowering stress.

In his study, Dimitrov (2017) argues that stress management is aided by recreational activities, regular exercise, and dietary habits, all of which can increase students' well-being. His research also demonstrates how too much focus is placed on academic achievement in the existing educational system, which harms children's overall development. Students become more frightened of failing as a result of their high academic attention. If recent grads want better jobs, they need to get better at communicating.

Subramani and Kadhiraavan (2017) investigated how stress related to school and the mental health of students interacted. Their findings indicate a direct connection between mental health and academic stress. Children face significant pressure from both their parents and the school to succeed academically, but they don't get the same degree of assistance. The mental health of students who participate often and constructively in academic forums is favorable.

Children who attend public and private schools exhibit distinct differences in their mental health, according to the study.

The author contends that because they originate from less affluent households and have less life experience, pupils in government schools catch a smaller amount of attention and exposure than those in private schools. This is one of the elements causing an increase in stress. Sharma et al. (2016) described many methods for handling stress in their study. Exercise, time management, leisure activities, etc. were some of these strategies. A stress-relieving environment's importance was also emphasized. A stress-free workplace may result from both mentoring pupils and modifying the way professors present their teachings.

Denscombe (2000) claims that even without mentioning genuine dread or arousal, it is possible to see examinations as stressful because of their fundamental evidence or intended outcomes. Putwain (2008) drew attention to the fact that stress is often used as a blanket term to describe all negative consequences of exams, such as time constraints, exhaustion from having to take several exams in one day, the need to finish coursework and study for exams at the same time, and disruptions to relationships and social activities. The exam anxiety concept, which is too general and lacking in specificity to be generally useful, cannot capture these aspects of exam stress. According to Denscombe (2012), this group of students finds exams to be stressful for a variety of reasons, including markers of self-worth, social pressure, and instructor pressure.

One of the most perplexing ideas is intelligence. When seen one way, everyone is aware of what intelligence is; nevertheless, when viewed another way, nobody is. Implicit conceptions of intelligence are distinct from explicit theories, and Western and Eastern perspectives on intelligence are distinct from one another. Different cultural conceptions of intelligence frequently emphasize certain traits differently. The exam anxiety concept, which is too general and lacking in specificity to be generally useful, cannot capture these aspects of exam stress. According to Pahuja (2004), a person's intelligence may be determined by how successfully they deal with problems that arise in daily life. Analysis of the present knowledge of intelligence highlights these interpretable components, such as verbal intelligence, problem-solving abilities, and practical intellect.

Corresponding to Kaur et al. (2004), there is a convincing and substantial correlation between intuition and students' attitudes regarding exams. High-IQ students demonstrated less stress since they had a positive viewpoint on living. When reflecting on this concept of intellect, it is critical to examine how individuals perform in realistic circumstances. Exam results cannot be used to extrapolate a student's behavior in other contexts. Different youngsters might understand and respond to this in different ways. In comparable circumstances, coping processes and coping techniques are both employed.

The links between “Canadian students' personality, coping, locus of control, emotional intelligence, and health-related behavior” were investigated by (Saklofske et al. 2007). While other indicators showed a more erratic pattern of association, consciousness was consistently associated with healthful behaviors. The variables of “coping, emotional intelligence, and locus of control” over one's health were shown to be interrelated. Through the use of scale-level factor analysis, it was determined that it is feasible to distinguish a higher-level coping component.

The findings of the study indicated that this variable had a moderating role in the association between an individual's personality traits, adherence to a nutritious dietary pattern, and engagement in consistent physical activity. The findings of this study suggest that more investigation is required to elucidate the connections between emotional intelligence and coping, as well as to explore the possible applications of emotional intelligence as a coping method.

Austin et al. (2010) looked at the connections between “coping, personality, emotional intelligence, and exam-related stress” among undergraduate students in Canada. Both before and throughout the exam session, stress levels were monitored. It has been demonstrated that higher degrees of emotional-focused coping and neuroticism, as well as lower emotional intelligence component scores, are associated with higher levels of stress. A factor analysis was conducted at the scale level to examine the relationship between the two subscales.

The study revealed the presence of three composite factors, each of which exhibited substantial loadings from at least one coping subscale as well as one from both the emotional intelligence and coping subscales.

3. Methodology

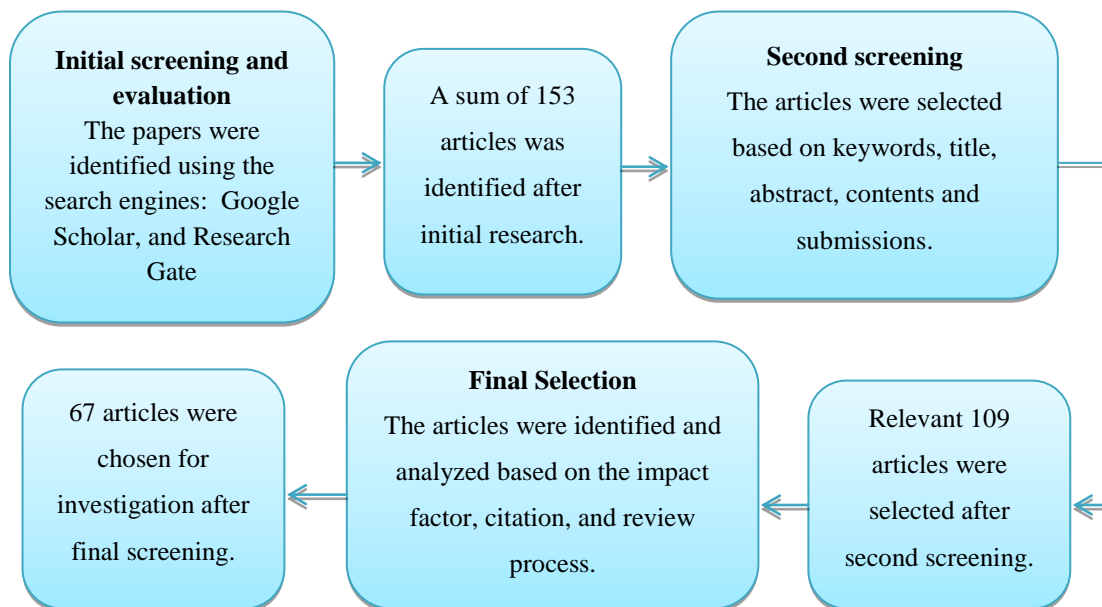


Figure 2: Screening Process of the Study

Source: Self-Preparation of Author

Secondary data from several publicly accessible repositories was used in the investigation. The analysis made use of information from many academic sources. The aforementioned publications were found online, among them on Google Scholar and Research Gate. In addition, 153 papers in total were submitted to an initial screening procedure, which identified and chose 109 articles for the subsequent round of screening. Titles, keywords, abstracts, and other pertinent data were evaluated as part of the criteria used for the second screening. The 67 articles that completed the final round of evaluation were evaluated using the same metrics for correctness, external applicability, citation styles, and review processes as the current study. The experimental techniques used in this inquiry are illustrated by the visual representation of the screening process (see Figure 2).

4. Discussions resulting into an assessment and prevention system

It can be concluded that the necessity for comprehensive treatments and support systems that address the unique difficulties experienced by students at all educational levels and serve as a reminder of the universality of test stress. Therefore, it is essential that educators, parents, and legislators acknowledge the significance of exam-related stress, put mechanisms into place to lessen its impacts and offer the assistance that kids of all academic backgrounds need. (Gosar and Venkatraman 2019; Waghachavare et al. 2013; Sasikumar and Bapitha 2019).

The burden of exam-related stress can have lasting impacts on students, affecting not only their academic performance but also their mental health (Bayram and Bilgel 2008; Eisenberg et al. 2007). It emphasizes the necessity of comprehensive support systems that take care of academic and emotional requirements. Prioritizing their students' mental health and well-being, schools, and universities should provide them with the tools and services they need to manage stress and avoid the bad effects that come with it. By doing this, educational institutions may make their students' studying environment more comfortable and healthier. (Kessler 1997; Moylan et al. 2013).

It's well-established in studies that exam anxiety is a common response to exam-related stress, and it can have detrimental effects on academic performance. This anxiety can manifest in various ways, including increased heart rate, difficulty concentrating, and fear of failure, all of which can hinder a student's ability to perform well on exams (Carter et al. 2006; Chapell et al. 2005). However, the study introduces an interesting and potentially effective coping strategy, which involves writing about testing worries. This intervention aims to alleviate the negative impact of stress on exam performance. It suggests that self-expression and reflection may be powerful tools in managing exam-related anxiety (Ramirez and Beilock 2011). Students who face this frequent difficulty might benefit from learning about stress management, creating a

supportive learning environment, and promoting open communication regarding exam-related stress. The ability to successfully handle stress can ultimately enhance academic achievement and general well-being for kids.

The significant roles that parent and educators play in influencing the levels of stress experienced by adolescents (Reschly et al. 2008). When students feel supported, encouraged, and connected to their school community, it can have a positive impact on their overall well-being and their ability to cope with academic challenges. Conversely, children may experience increased stress when they are subjected to excessive pressure from both parents and instructors. It can be derived that there is vital importance of providing students with a healthy, supportive, and learning environment that emphasizes their emotional well-being. Together, parents and teachers should provide a positive environment where children may learn without feeling too pressured or unsafe. To assist young learners in having a more happy and fruitful learning experience, open communication between parents, instructors, and students can help identify and resolve sources of stress and anxiety. In the end, for students overall growth and academic performance, a coordinated strategy that prioritizes their emotional health is crucial (Reddy et al. 2018; Denscombe 2000).

5. Conclusion

The review on exam stress among students in the educational system provides an in-depth study of this complex problem, in conclusion. Examining variance, outcomes, coping strategies, the function of parents and educators, and successful treatments have all been influenced by the study topics set in the review. This collection of research provides an excellent framework for developing evidence-based treatments and support systems to reduce exam stress and enhance students' general well-being and academic achievement. Although the examined literature provides insightful information, it is important to recognize any potential limits. Some studies may have methodological problems, and it's possible that cultural differences in how people perceive exam stress haven't been sufficiently taken into account. Future studies should focus on filling in these gaps and providing a more complex knowledge of exam stress while taking different cultural settings into account and improving research methodology.

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