The Impact of Anxiety on Academic Achievement: A Comprehensive Review

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Abstract-This research paper aims to provide a comprehensive review of the relationship between anxiety and academic achievement. Anxiety is a common mental health concern among students that can significantly affect their academic performance. This paper examines various factors contributing to anxiety, such as academic pressure, test anxiety, and social anxiety, and explores the ways in which anxiety can hinder academic achievement. Additionally, potential interventions and strategies to mitigate the negative effects of anxiety on academic performance are discussed. The findings of this review emphasize the importance of addressing anxiety in educational settings to promote optimal academic outcomes.

Keywords: Anxiety, Achievement, Performance, Academic.

1.0 Introduction

Anxiety is a prevalent mental health condition that affects individuals of all ages, including students. It is characterized by feelings of worry, fear, and apprehension, often accompanied by physical symptoms such as increased heart rate, sweating, and difficulty concentrating. Anxiety can have a significant impact on various aspects of an individual's life, including academic achievement. Academic achievement refers to the extent to which a student successfully meets the goals and standards set by educational institutions. It encompasses various factors, including grades, test scores, class participation, and overall academic performance. Anxiety can interfere with a student's ability to perform well academically, leading to several negative outcomes. This comprehensive review aims to explore the impact of anxiety on academic achievement by examining the existing research and literature in the field. By understanding the relationship between anxiety and academic performance, educators, parents, and mental health professionals can gain insights into the challenges faced by anxious students and develop strategies to support their educational journey.

1.1 Significance Of The Study

The impact of anxiety on academic achievement extends beyond individual students. Educational

institutions, policymakers, and society at large are affected by the consequences of anxietyrelated challenges in education. High levels of anxiety can hinder students' functioning, attention, memory, and overall academic performance. Moreover, persistent anxiety can lead to long-term negative effects on mental health, self-esteem, and prospects. By comprehensively reviewing the literature on this topic, this paper aims to shed light on the multifaceted relationship between anxiety and academic achievement.

1.2 Statement Of The Problem

The statement of the problem is "The impact of Anxiety on Academic Achievement: A Comprehensive Review"

1.3 Objectives Of The Study

The primary objective of this research paper is to provide a comprehensive review of the impact of anxiety on academic achievement. Specifically, the paper aims are:

- 1. To summarize existing research on the prevalence of anxiety among students.
- To explore the various dimensions of anxiety, including generalized anxiety disorder, social anxiety, test anxiety, and performance anxiety.
- 3. To examine the empirical evidence regarding the impact of anxiety on academic achievement.

- 4. To identify potential mechanisms underlying the anxiety-academic achievement relationship.
- 5. To discuss implications for educational practice, intervention strategies, and future research directions.

2.0 Review Of Related Literature

Mohammad Nadeem, Akhtar Ali, Saira Maqbool and Syeda Uzma Zaidi conducted a study on Impact of Anxiety on the Academic Achievement of Students Having Different Mental Abilities at University level in Bahawalpur (Southern Punjab) Pakistan. The objectives of the study were to review the symptoms of anxiety in students, to evaluate the impacts of anxiety on the academic achievements of students, to differentiate the impacts of anxiety on the academic achievements of male and female students, to give suggestions to overcome anxiety and increase academic achievements.

Bethany H. McCurdy, Mikaela D. Scozzafava, Travis Bradley, Ryan Matlow, Carl F. Weems & Victor G. Carrion conducted a study on Impact of anxiety and depression on academic achievement among underserved children: evidence of suppressor effects. This underscores the study importance considering how diverse groups of individuals, namely Hispanic youth in historically underresourced school systems, experience symptoms of anxiety, depression, and ADHD symptoms and how these symptoms affect school achievement. Indeed, minority youth have been found to have greater levels of anxiety and depression, of which amounts have been reported to be considerably high at the elementary school level (Saluja et al., 2004; Yockey et al., 2019), thus leaving minority youth at greater risk of poor academic achievement (Valencia, 2002). The study finds that anxiety hyperactivity positively predict spelling and math computation, while depression and attention problems negatively predict spelling and math computation.

Tuljaram Sonal conducted a study on Impact of Anxiety on Academic Achievement among School going students. She explained Anxiety is not only a most preferred theme and topic for many poets and novelists, but it has become a most alarming and noteworthy human being related phenomenon which is influencing behaviour and behavioural outcomes. In this modern age also, individuals cannot prevent or escape themselves from the anxiety problems throughout their lives, especially during their crucial stages and years of academics and at the of beginning their career. Academic achievements are important instruments of personal progress, which helps to achieve the goals and make all round development of a child. It also helps in the fulfilment of parent's aspirations that their children can also climb the ladders of success. In achievement of the goals, in the general education system lots of pressures are imposed on the students and also teachers. The achievements of students in our country are measured in terms of their performance in examinations. On the basis of achievements of performances in school examinations. students are labelled intelligent, mediocre, fast learners/ slow learners and whether they are ready for the next class or not. The objectives of the study were to study academic anxiety, academic achievement relation between them of teenagers. Anxiety and academic achievement are inversely related. Family type and family size have significant positive correlation with anxiety. Child sex does not have any effect on anxiety and academic achievement. Class of child and also age inversely related to anxiety while class of child significant exhibited age positive correlation with academic achievement. The study concluded that Socioeconomic status has no effect on anxiety and academic achievement the variables anxiety and academic achievement are independent on socioeconomic status student anxiety and academic achievement are inversely related indicating higher the anxiety lower the academic achievement.

A.I. Mihăilescu, L.V. Diaconescu, Ciobanu, T. Donisan and C. Mihailesc conducted a study on The impact of anxiety and depression on academic performance in undergraduate medical students. Stress associated with medical education, correlated with symptoms of depression and anxiety, has involved in generating been academic performance problems and thus, long-term

consequences, such as poor quality of medical care. If anxiety and depression are proved to influence quality of academic achievement, their prevention could lead to better outcomes also in the quality of medical care.

Dr. Mohd Shakir conducted a study on Academic Anxiety as a Correlate of Academic Achievement. This study was conducted to study the relationship and effects of academic anxiety on the academic achievements of students. A sample of 352 students of senior secondary school was taken through random sampling technique. A reliable and valid, Academic Anxiety Scale standardized by Dr. A.K. Singh and Dr. Sen Gupta was used to collect the data. Mean SD, Correlation and t-test were used for the analysis of the data. Research findings revealed an inverse relationship (negative correlation) between the academic achievement and the academic anxiety of students. Significant differences were found between the academic achievement of high and low academic anxiety groups of students, between high and low academic anxiety groups of males, between high and low academic anxiety groups of females, between high academic anxiety groups of male and female students, and also between low academic anxiety groups of male and female students

3.0 Methodology

This research paper adopts a systematic approach to reviewing the literature on anxiety and academic achievement. A comprehensive search of scholarly databases, including peerreviewed journals, books, and academic conference proceedings, will be conducted to identify relevant studies. The inclusion criteria will focus on empirical research that investigates the relationship between anxiety and academic achievement in various educational contexts. The selected articles will be critically analysed and synthesized to provide a comprehensive understanding of the topic.

The impact of anxiety on academic achievement is a topic of significant research interest, and various studies have explored the relationship between anxiety and academic performance. Anxiety can have a pervasive influence on students' ability to learn, concentrate, and perform well in academic settings. Here is a

comprehensive review of the topic, including the prevalence and types of anxiety among students.

4.0 Prevalence Of Anxiety Among Students

Anxiety disorders are prevalent among students, and their rates have been increasing in recent years. The exact prevalence rates may vary depending on the specific study and the population under investigation. However, research suggests that a substantial number of students experience anxiety-related difficulties that affect their academic functioning. Factors such as academic pressure, social stressors, and personal expectations contribute to the prevalence of anxiety among students.

Types of Anxiety Among Students:

There are various types of anxiety disorders that can impact students' academic achievement. Some common anxiety disorders observed among students include:

- a. Generalized Anxiety Disorder (GAD): Students with GAD often experience excessive worry and fear about various aspects of their lives, including academic performance. This chronic anxiety can interfere with their ability to concentrate, retain information, and perform well on exams.
- b. Social Anxiety Disorder (SAD): SAD is characterized by intense fear or anxiety in social situations. Students with SAD may struggle with participating in class discussions, giving presentations, or interacting with peers and teachers. This can hinder their academic engagement and hinder their overall performance.
- c. Test Anxiety: Test anxiety is a specific type of anxiety that occurs before or during exams. It can manifest as physical symptoms (e.g., racing heart, sweating) and cognitive symptoms (e.g., negative thoughts, difficulty focusing). Test anxiety can impair students' ability to recall information accurately and perform to their full potential.
- d. Perfectionism-Related Anxiety: Some students develop anxiety due to high levels of perfectionism. They set excessively high standards for themselves and fear failure or making mistakes. This anxiety can lead to procrastination, avoidance of challenging tasks, and a decrease in overall academic performance.

Impact of Anxiety on Academic Achievement:

Anxiety can significantly impact students' academic achievement in multiple ways:

a. Impaired Concentration and Learning: Anxiety can make it difficult for students to concentrate, focus, and absorb new information. Intrusive worries and racing thoughts can interfere with their ability to pay attention in class and understand complex concepts.

b. Reduced Information Retrieval: Anxiety can hinder students' ability to retrieve information from memory, particularly during exams or high-pressure situations. The cognitive effects of anxiety, such as mental blocks and decreased working memory capacity, can impair their performance on tests and assignments.

c. Avoidance Behaviours: Students with anxiety may engage in avoidance behaviours, such as skipping classes, avoiding social interactions, or procrastinating on assignments. These behaviours can lead to missed learning opportunities, incomplete assignments, and lower grades.

d. Negative Self-Beliefs and Self-Efficacy: Anxiety can erode students' self-confidence and belief in their abilities. Negative self-talk and self-doubt can hinder their motivation, persistence, and overall academic performance.

e. Disrupted Sleep and Physical Health: Chronic anxiety can disrupt sleep patterns, leading to fatigue and decreased cognitive functioning. Additionally, anxiety can contribute to physical symptoms such as headaches, stomach-aches, and muscle tension, further impacting students' well-being and ability to perform academically. It is important to note that anxiety affects individuals differently, and some students may be more resilient or develop coping strategies to manage their anxiety effectively. However, for those experiencing significant anxiety, early identification, intervention, and support systems are essential in helping them navigate their academic challenges and promote well-being.

5.0 The Impact Of Anxiety On Academic Achievement

Anxiety can have a significant impact on academic achievement. When students experience high levels of anxiety, it can interfere with their ability to concentrate, learn, and perform well academically. Here is a

comprehensive review of the impact of anxiety on academic achievement.

Cognitive Functioning: Anxiety can impair cognitive functioning, including attention, memory, and information processing. When students are anxious, they may have difficulty focusing on tasks, remembering information, and organizing their thoughts effectively. This can lead to difficulties in understanding and retaining new material, which can ultimately impact academic performance.

Test Performance: Anxiety can significantly affect test performance. Students who experience test anxiety may experience racing thoughts, physical symptoms (such as rapid heartbeat or sweating), and an overwhelming sense of dread or panic before and during exams. These symptoms can interfere with their ability to recall information accurately and perform to their full potential.

Procrastination: Anxiety can contribute to procrastination, as students may feel overwhelmed or afraid of failure. They may avoid starting assignments or studying until the last minute, which can result in rushed and lower-quality work. Procrastination can negatively impact academic achievement by reducing the time available for effective learning and preparation.

Attendance and Participation: Anxiety can also affect students' attendance and participation in class. Students with anxiety may avoid attending class or participating in discussions and group activities due to fear of judgment or embarrassment. This can lead to missed opportunities for learning, reduced engagement with the material, and a lower overall academic performance.

Perfectionism: Anxiety is often associated with perfectionism, where students set excessively high standards for themselves and fear making mistakes. This perfectionistic mindset can lead to increased stress and anxiety, as well as a fear of taking risks or trying new approaches. It can hinder creativity and problem-solving abilities, which are essential for academic success.

Emotional Well-being: Chronic anxiety can have negative effects on students' emotional wellbeing, which can indirectly impact their academic achievement. Anxiety can lead to increased feelings of sadness, low self-esteem, and decreased motivation. These emotional challenges can make it difficult for students to stay focused, persevere through challenges, and maintain a positive attitude towards learning. Sleep and Physical Health: Anxiety can disrupt sleep patterns and contribute to physical health problems. Lack of sleep and poor physical health can impair cognitive functioning and overall academic performance. Anxiety-related sleep disturbances can make it harder for students to concentrate and retain information, leading to difficulties learning and completing assignments.

Academic Self-efficacy: Anxiety can undermine students' belief in their abilities to succeed academically, known as academic self-efficacy. When students doubt their capabilities, they may be less likely to engage in academic tasks, seek help when needed, or persist in the face of challenges. This can limit their academic achievement potential.

It's important to note that the impact of anxiety on academic achievement can vary among individuals. While some students may be more susceptible to the negative effects of anxiety, others may develop coping strategies or receive support that helps mitigate these effects. Creating a supportive and inclusive learning environment, providing resources for managing anxiety, and promoting mental health awareness can all contribute to improving academic outcomes for anxious students.

6.0 Mechanisms Underlying The Anxiety – Academic Achievement Relationship

The relationship between anxiety and academic achievement is complex and influenced by several underlying mechanisms. Understanding these mechanisms can provide insights into how anxiety affects academic performance. Here are some key mechanisms underlying the anxiety-academic achievement relationship:

Cognitive Interference: Anxiety can lead to cognitive interference, which disrupts students' ability to concentrate and process information effectively. Anxious thoughts and worries can occupy working memory, making it difficult for students to focus on the task at hand, encode new information, or retrieve previously learned material. This cognitive interference can hinder

learning and lead to lower academic achievement.

Attentional Biases: Anxiety can create attentional biases towards threat-related stimuli. Students experiencing anxiety may have a heightened sensitivity to potential negative outcomes or failures. As a result, they may allocate more attention to threat-related cues (e.g., mistakes, criticism) rather than focusing on the learning material. This attentional bias can divert cognitive resources away from academic tasks, impacting comprehension performance.

Perceived Control and Self-Efficacy: Anxiety can undermine students' perceived control over their academic outcomes and their belief in their own abilities to succeed (self-efficacy). High levels of anxiety may lead students to doubt their competence, expect negative outcomes, or feel helpless in the face of academic challenges. This negative impact on perceived control and self-efficacy can decrease motivation, engagement, and effort, ultimately affecting academic achievement.

Test Anxiety: Test anxiety is a specific form of anxiety that arises in testing situations and can significantly impair performance. Students experiencing test anxiety may have excessive worry about exams, fear of failure, and physiological symptoms that interfere with their ability to demonstrate their knowledge effectively. Test anxiety can lead to poor performance on exams, despite adequate preparation, which can negatively impact overall academic achievement.

Negative Self-Talk and Rumination: Anxiety is often accompanied by negative self-talk and rumination, where students engage in repetitive, self-critical thoughts. These negative thought patterns can undermine confidence and increase stress levels, further exacerbating anxiety symptoms. The cycle of negative self-talk and rumination can create a hostile environment that hinders concentration, problem-solving abilities, and academic performance.

Avoidance and Procrastination: Anxiety can lead to avoidance behaviors and procrastination as a coping mechanism. Students may avoid challenging tasks or delay starting them due to fear of failure or the anxiety-inducing nature of

the task itself. Procrastination can result in inadequate time for preparation and rushed, lower-quality work, ultimately affecting academic achievement.

Physiological Factors: Anxiety triggers physiological responses, such as increased heart rate, sweating, and muscle tension, through the activation of the body's stress response. These physiological symptoms can be distracting and uncomfortable, making it harder for students to concentrate and perform optimally. Chronic anxiety can also disrupt sleep patterns, leading to fatigue and further impairments in cognitive functioning and academic achievement.

Social Factors: Social factors can contribute to the anxiety-academic achievement relationship. For instance, negative social interactions, peer pressure, or bullying can elicit anxiety in students, affecting their well-being and academic performance. Additionally, the fear of negative evaluation from teachers or peers can increase anxiety levels and impact motivation, participation, and engagement in the classroom. Understanding these underlying mechanisms can guide interventions and support strategies aimed at reducing anxiety and improving academic achievement. By addressing cognitive interference, promoting positive self-beliefs, teaching coping strategies, and fostering a supportive learning environment, educators and mental health professionals can help mitigate the negative impact of anxiety on students' academic success.

7.0 Fators Influencing The Relationship Between Anxiety And Academic Achievement

The impact of anxiety on academic achievement has been the subject of extensive research. Anxiety can significantly affect students' ability to perform well academically, and several factors influence the relationship between anxiety and academic achievement. Some of these factors include gender differences, socioeconomic status, cultural and ethnic factors, as well as academic stressors and the school environment.

Gender Differences: Research has shown that there can be differences in how anxiety affects academic achievement based on gender. Some studies suggest that girls may experience higher levels of anxiety related to academic performance compared to boys. This difference may be attributed to various factors, including societal expectations, gender stereotypes, and differences in coping mechanisms.

Socioeconomic Status: Socioeconomic status (SES) can play a significant role in the relationship between anxiety and academic achievement. Students from lower socioeconomic backgrounds may face additional stressors related to financial constraints, lack of resources, and limited access to educational opportunities. These stressors can contribute to increased anxiety levels, potentially impacting academic performance.

Cultural and Ethnic Factors: Cultural and ethnic factors can influence the experience and expression of anxiety among students. Cultural norms, values, and expectations regarding academic success may contribute to higher levels of anxiety. Additionally, cultural differences in coping strategies and social support systems can influence how anxiety affects academic achievement.

Academic Stressors and School Environment: Academic stressors, such as high workload, intense competition, and pressure to succeed, can contribute to anxiety among students. The school environment, including the quality of with relationships teachers and availability of support services, and overall school climate, can also influence anxiety levels and subsequently impact academic achievement.

It is important to note that the relationship between anxiety and academic achievement is complex and multifaceted. While anxiety can negatively affect academic performance, it is also influenced by various individual and contextual factors. Strategies to address anxiety and promote academic achievement may involve interventions at both the individual and systemic levels, including mental health support, stress management techniques, fostering a supportive school climate, and addressing structural inequalities that contribute to socioeconomic disparities.

8.0 Implications For Educational Practice And Intervention Strategies

The impact of anxiety on academic achievement is a significant concern in educational settings.

affect students' ability Anxiety can to concentrate. remember information, and well academically. perform In this comprehensive review, we will explore the implications for educational practice and intervention strategies, including individuallevel and school-based interventions, as well as collaboration between schools and mental health professionals. Furthermore, we will discuss the importance of promoting resilience and emotional well-being in students to mitigate the negative effects of anxiety on academic achievement.

Individual-Level Intervention:

Individual-level interventions focus on addressing anxiety at the student level. These interventions can include counselling, cognitive-behavioural therapy (CBT), and stress management techniques. By providing students with tools to manage their anxiety, they can develop effective coping strategies, enhance their self-regulation skills, and improve their academic performance.

School-Based Intervention:

School-based interventions aim to create a supportive and inclusive learning environment that addresses students' anxiety. These interventions can involve implementing stress reduction programs, providing social-emotional learning (SEL) curriculum, and promoting positive school climates. By fostering a supportive atmosphere, schools can reduce anxiety levels among students and create conditions conducive to academic success.

Collaboration between Schools and Mental Health Professionals:

Collaboration between schools and mental health professionals is crucial comprehensive support. School counsellors, psychologists, and other mental professionals can work together with teachers to identify and support students experiencing anxiety. This collaboration can involve implementing early intervention programs, conducting screenings, and providing targeted support to at-risk students. By working schools and together, mental health professionals can address anxiety effectively and improve students' academic outcomes.

Promoting Resilience and Emotional Well-Being:

Promoting resilience and emotional well-being is vital for preventing and managing anxiety in students. Schools can integrate social-emotional learning (SEL) programs into their curriculum, which focus on developing students' emotional intelligence, self-awareness, and coping skills. Additionally, creating opportunities for physical activity, fostering positive peer relationships, and providing a supportive network can enhance students' overall well-being and resilience, reducing the impact of anxiety on academic achievement.

In conclusion, addressing anxiety's impact on academic achievement requires a multifaceted approach. Individual-level interventions, such as counselling and CBT, can equip students with skills to manage their anxiety. School-based interventions, including stress programs and SEL curriculum, create a supportive environment. Collaboration between schools and mental health professionals ensures comprehensive support. Lastly, promoting resilience and emotional well-being helps students develop coping strategies and thrive academically. By implementing these strategies, educators and mental health professionals can effectively mitigate the negative effects of anxiety on academic achievement.

9.0 Future Directions And Implications For Research

To advance knowledge in this field, this section proposes future research directions. These may include investigating the effectiveness of specific interventions, examining the role of individual and contextual factors in the anxiety-academic achievement relationship, and exploring the impact of emerging educational technologies on anxiety and academic outcomes. Understanding these areas can guide the development of targeted interventions and inform policy decisions.

Longitudinal Studies and Intervention Research: To gain a deeper understanding of the relationship between anxiety and academic achievement, this section emphasizes the need for longitudinal studies. Longitudinal research designs can provide insights into the long-term effects of anxiety on academic trajectories and identify potential risk factors and protective factors. Furthermore, intervention research is

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essential for developing evidence-based strategies to support students in managing anxiety and improving their academic outcomes. Importance of Early Identification and Prevention:

Early identification of anxiety-related issues is crucial for implementing timely interventions preventing long-term negative consequences. This section discusses the significance of screening programs, teacher awareness. and collaboration between educators and mental health professionals to identify and address anxiety symptoms in students. Early prevention strategies can help mitigate the impact of anxiety on academic achievement.

Policy Implications for Educational Institutions: Educational institutions play a vital role in supporting students' mental health academic success. This section explores policy implications, including the need health comprehensive mental programs, increased access to counselling services, training for educators on recognizing and addressing anxiety, and fostering a supportive school environment. Policy changes at the institutional level can create a conducive atmosphere for students to thrive academically despite anxiety-related challenges.

10.0 CONCLUSION

This paper concludes by summarizing the key findings of the comprehensive review and emphasizing the importance of addressing anxiety in educational settings. By recognizing the impact of anxiety on academic achievement, conducting further research, and implementing appropriate interventions, we can support students' mental well-being and promote their academic success.

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