IJNRD.ORG ISSN : 2456-4184
INTERNATIONAL JOURNAL OF NOVEL RESEARCH AND DEVELOPMENT (IJNRD) | IJNRD.ORG
An International Open Access, Peer-reviewed, Refereed Journal

THE IMPACT OF ACADEMIC PRESSURE AND PERFORMANCE ON DEPRESSION, ANXIETY, STRESS, AND SLEEP QUALITY: A COMPARATIVE STUDY OF STUDENTS LIVING WITH AND AWAY FROM PARENTS

Jahanvi Sharma
Master's Degree Student
Amity Institute of Psychology and Allied Sciences,
Amity University , Noida, India

Abstract : This study investigates the relationship between academic pressure, mental health outcomes, and sleep quality among college students, with a focus on differences based on living arrangements. Using a sample of 151 students, standardized tools such as the Educational Stress Scale for Adolescents (ESSA), Depression Anxiety Stress Scale-10 (DASS-10), and Pittsburgh Sleep Quality Index (PSQI) were administered to assess levels of academic stress, psychological well-being, and sleep patterns. Descriptive analysis revealed moderate levels of academic pressure and psychological distress among the participants. Independent samples t-tests and Mann-Whitney U tests were conducted to compare students living with parents and those living away. The results indicated no statistically significant difference in mental health or sleep quality between the two groups, leading to the acceptance of the null hypothesis. However, correlation analysis revealed a strong and statistically significant relationship between academic pressure and poor mental health outcomes, as well as between academic pressure and reduced sleep quality, supporting the alternative hypothesis for Objective 2. On the other hand, no significant correlation was found between academic performance and mental health or sleep quality, confirming the null hypothesis for Objective 3. The findings suggest that while living arrangements may not significantly influence mental health or sleep, academic pressure plays a crucial role in shaping students' psychological and physical well-being. The study emphasizes the need for institutional interventions, including stress management workshops, mental health counseling, and academic support systems. Limitations include the reliance on self-report measures and the cross-sectional design, which restrict causal inferences. Further longitudinal research is recommended to explore these associations over time.

IndexTerms- Academic Pressure, Mental Health, Sleep Quality, College Students, Living Arrangements, ESSA, DASS-10, PSQI.

I. INTRODUCTION

1.1Background of the study

In today's competitive academic environment, students are increasingly subjected to high levels of stress, anxiety, and depression due to mounting academic expectations and performance pressures. The transition into higher education brings with it a range of challenges, including academic workload, time management, peer competition, and future career uncertainties. These stressors are often exacerbated by the student's living situation, with those living away from parental supervision frequently facing additional emotional and psychological burdens such as loneliness, lack of support, and poor lifestyle habits. Academic pressure, when left unmanaged, can significantly impair not only mental well-being but also sleep quality, a vital component of cognitive functioning and overall health. Numerous studies have established that sleep disturbances are commonly associated with increased levels of depression and anxiety, thereby forming a vicious cycle that hampers both academic and personal life.Understanding the dynamics of academic stress and its psychological ramifications becomes even more critical when examining how living conditions affect these experiences. Students residing with parents may benefit from emotional security, structured routines, and better coping mechanisms, while those living independently may struggle with autonomy, household responsibilities, and reduced access to familial support. The current study seeks to explore these nuances by employing standardized tools: the Educational Stress Scale for Adolescents (ESSA) to assess academic pressure, the Depression Anxiety Stress Scale (DASS-10) to measure psychological health, the Pittsburgh Sleep Quality Index (PSQI) to gauge sleep quality, and

academic performance measured through the most recent CGPA. By conducting a comparative analysis between students living with parents and those living away, this research aims to provide a comprehensive understanding of how academic stress and performance impact mental health and sleep quality. The insights derived from this study can inform policymakers, educators, and mental health professionals about the importance of holistic support systems in academic settings.

1.2 Role of parental presence and social support in student life

Parental presence and social support play a profound and multifaceted role in shaping a student's academic, emotional, and psychological well-being. During adolescence and early adulthood—critical developmental stages when most students are engaged in academic pursuits—parental guidance, encouragement, and emotional availability serve as stabilizing forces that buffer the adverse effects of stress, anxiety, and performance pressure. In an era characterized by intense academic competition and societal expectations, the role of parents is no longer confined to providing for the basic needs of food, shelter, and education but has expanded to include psychological support, moral guidance, and coping assistance. Their presence often acts as a psychological cushion, enhancing a student's resilience to external stressors, and offering a sense of security that helps reduce feelings of isolation, especially during times of academic hardship.Living with parents can significantly shape the daily routines and lifestyle habits of students. Parents tend to create a structured environment that encourages discipline, timely sleep schedules, proper nutrition, and healthy social behavior. This structure directly contributes to better stress management and mental stability. For instance, the simple act of having meals together or discussing the day's events can foster emotional intimacy and serve as a platform for students to share their concerns. Such interactions promote open communication, allowing parents to recognize signs of emotional distress early and provide appropriate support. In contrast, students living away from their parents may lack this immediate access to a support system, leading to greater vulnerability to mental health issues. Without the steady presence of parental figures, students are often left to navigate academic demands, financial pressures, and social challenges on their own, sometimes leading to maladaptive coping behaviors such as poor sleep hygiene, unhealthy eating patterns, procrastination, and even substance use.Research consistently indicates that perceived social support, particularly from parents, is inversely related to symptoms of depression and anxiety in students. The presence of emotionally available and supportive parents fosters a secure attachment style, which equips students with the confidence to face academic challenges without being overwhelmed. When students perceive their parents as understanding and accepting rather than demanding and critical, they are more likely to develop a positive academic self-concept and maintain high levels of intrinsic motivation. Moreover, the perception that one has someone to rely on during periods of high academic demand can mitigate feelings of hopelessness and academic burnout. Parental support also enhances students' problem-solving capabilities by modeling constructive coping strategies, such as time management, goal setting, and cognitive reappraisal.

The role of parental presence becomes even more critical during transitional phases, such as moving from high school to college or from undergraduate to postgraduate studies. These periods are often associated with elevated stress due to unfamiliar academic environments, increased academic expectations, and the need to establish new social networks. During such transitions, students who live with their parents or maintain strong emotional ties with them are more likely to experience lower levels of psychological distress and adjustment difficulties. Parents often serve as consistent anchors in an otherwise fluid and evolving social world, helping students maintain continuity and a sense of identity.In addition to emotional and psychological benefits, parental presence contributes to practical aspects of student life, such as financial management, academic planning, and even healthcare. Students living with their parents often benefit from shared resources and logistical support, which reduces the burden of managing daily life responsibilities independently. This enables them to devote more time and energy to academic tasks, thereby enhancing their performance. Furthermore, parents may play an active role in monitoring academic progress, reminding students of deadlines, or encouraging them to seek help when necessary. These forms of involvement, when balanced and non-intrusive, can serve as protective factors against academic stress.However, the quality of parental involvement is crucial. Overprotective or excessively controlling parenting styles may lead to increased performance anxiety and reduced autonomy in students. Such dynamics can be counterproductive, undermining a student's self-efficacy and stifling their ability to develop independence. Therefore, the effectiveness of parental support is significantly influenced by the parents' ability to strike a balance between being supportive and allowing autonomy. Parents who respect their child's individuality, encourage independent decision-making, and offer unconditional emotional support create an empowering environment conducive to psychological well-being and academic success.

On the other hand, students living away from parents, especially for the first time, face a multitude of challenges that can contribute to mental health difficulties. The absence of immediate familial support may exacerbate the emotional strain experienced during exams, academic failures, or social rejection. Many students living independently may also struggle with loneliness, homesickness, and the pressures of managing academic, personal, and financial responsibilities without prior experience. These stressors can accumulate and manifest as chronic anxiety, sleep disturbances, irritability, and depression. The lack of parental supervision may also lead to unstructured routines and poor sleep hygiene, both of which negatively affect cognitive functioning and academic performance.In such contexts, the role of social support from peers, mentors, and institutional support systems becomes paramount. Students who are physically distant from their parents often seek emotional support from friends, roommates, or academic mentors to cope with the challenges of student life. Peer support can mimic the benefits of parental presence to some extent by providing companionship, validation, and emotional regulation. However, it is often less consistent and may lack the depth and unconditional quality characteristic of parental support. Universities and colleges must therefore play an active role in creating support networks through counseling services, mentorship programs, and peer-led initiatives to bridge the gap created by physical separation from parents.Cultural background also influences the role of parental presence in student life. In collectivist cultures such as those in many Asian and African countries, family plays a central role in decision-making, emotional well-being, and identity formation. Students from such backgrounds may find it particularly difficult to adjust to living away from home due to their stronger emotional ties to family members. These students may also experience

greater cultural conflict when adapting to more individualistic educational environments, which often emphasize independence and self-reliance. For them, the absence of parental presence may be felt more acutely and can lead to increased levels of stress, cultural dissonance, and identity confusion.Digital communication technologies such as video calls, messaging apps, and social media have somewhat bridged the physical distance between students and their parents, enabling continuous emotional contact and support. While virtual interactions cannot replace physical presence, they still offer emotional reassurance and a sense of connectedness. Regular communication with parents, even from afar, has been shown to mitigate feelings of isolation and provide emotional reinforcement during stressful academic periods. Parents who actively engage in their child's life through these platforms can continue to play a guiding role and offer encouragement, albeit remotely.

Moreover, the perception of parental support is sometimes more influential than the actual physical presence. Students who feel emotionally connected to their parents, who know they can call or message them at any time and receive an empathetic response, often fare better than those who live with parents but have distant or conflict-ridden relationships. Emotional availability, understanding, and trust form the core of effective parental support, regardless of geographical proximity.In conclusion, parental presence and social support are critical determinants of a student's ability to navigate academic life successfully and healthily. Living with parents provides a multifaceted support system that contributes to emotional stability, better sleep hygiene, and academic discipline. For students living away from home, the absence of parental presence can heighten academic stress, increase susceptibility to mental health issues, and disrupt sleep patterns. However, the perception of parental support, facilitated through both physical and digital means, can still offer significant emotional benefits. It is essential for parents, educators, and institutions to recognize the varying needs of students based on their living arrangements and to provide targeted support that promotes autonomy, resilience, and psychological well-being. By fostering nurturing environments—whether at home or through campus support services—stakeholders can significantly enhance the academic and emotional outcomes for students, ensuring that they not only succeed academically but also thrive personally.

1.3 Relationship between sleep quality and academic stress

Sleep is a foundational pillar of human health and cognitive functioning, playing a critical role in memory consolidation, emotional regulation, and overall psychological well-being. For students, especially those in high school and higher education, quality sleep is indispensable for optimal academic performance and mental health. However, academic stress—arising from competitive environments, overwhelming coursework, examinations, and career uncertainties—has increasingly emerged as a dominant factor affecting students' sleep quality. The relationship between sleep and academic stress is inherently bidirectional: while academic stress leads to disrupted sleep patterns, poor sleep quality, in turn, exacerbates cognitive and emotional difficulties, making it harder for students to cope with academic demands.Academic stress, often fueled by the pressure to maintain high grades, meet deadlines, and compete with peers, triggers a cascade of physiological and psychological responses. The body's stress response, characterized by elevated cortisol levels and heightened sympathetic nervous system activity, interferes with the natural sleep-wake cycle, making it difficult for students to fall asleep or stay asleep. This condition, often referred to as stress-induced insomnia, is prevalent among students who perceive their academic workload as excessive or unmanageable. As the stress continues unchecked, it can lead to chronic sleep deprivation, which diminishes concentration, reduces problem-solving abilities, and impairs decision-making—core competencies needed for academic success.

Numerous empirical studies have demonstrated a strong negative correlation between academic stress and sleep quality. Students reporting high levels of academic stress typically experience difficulties in sleep initiation (sleep latency), frequent nocturnal awakenings, non-restorative sleep, and reduced total sleep time. Instruments such as the Pittsburgh Sleep Quality Index (PSQI), a widely used self-report measure, provide insights into the multifaceted dimensions of sleep quality, including subjective sleep satisfaction, latency, duration, efficiency, disturbances, and daytime dysfunction. In research studies where PSQI scores are paired with academic stress scales such as the Educational Stress Scale for Adolescents (ESSA), results consistently indicate that increased academic stress corresponds with higher PSQI scores, reflecting poorer sleep quality.One of the primary ways academic stress affects sleep is through cognitive hyperarousal—a state in which students find it difficult to switch off their minds. Racing thoughts about upcoming assignments, exam preparations, and fear of failure prevent the mind from transitioning into a restful state. Even when students do manage to sleep, the quality of that sleep is often compromised, with shallow stages of sleep dominating over deeper, more restorative ones. The reduction in deep sleep (slow-wave sleep) affects the brain's ability to consolidate learning and regulate emotions, which may result in heightened irritability, reduced motivation, and compromised academic performance.Moreover, the behavioral coping strategies adopted by students in response to academic stress often further disrupt sleep. Common maladaptive habits include excessive caffeine consumption, all-night study sessions, irregular sleep schedules, and increased screen time before bed. These behaviors can desynchronize circadian rhythms—the body's internal clock—leading to delayed sleep phase syndrome, a condition particularly common among students. The use of stimulants such as caffeine or energy drinks to counteract sleepiness during the day may create a vicious cycle, making it even harder to fall asleep at night and thereby intensifying academic stress the next day due to fatigue and cognitive decline.

The relationship between academic stress and sleep quality is further complicated by students' living environments. Those residing in hostels or dormitories often report more disrupted sleep patterns compared to those living at home. Environmental factors such as noise, shared accommodations, and lack of parental regulation can contribute to poor sleep hygiene. Additionally, the absence of parental support in managing stress and routines can leave students more vulnerable to both sleep disturbances and the psychological effects of academic overload. In contrast, students living with their families may benefit from structured routines, emotional reassurance, and healthier sleep practices, which can mitigate the negative effects of academic stress.A key consequence of poor sleep quality associated with academic stress is its impact on mental health. Sleep deprivation has been shown to significantly increase the risk of developing symptoms of depression, anxiety, and stress, which further compound

academic challenges. Students who do not sleep well often experience mood swings, decreased emotional resilience, and a sense of hopelessness or lack of control over their academic life. These psychological outcomes, when not addressed, can lead to more serious mental health conditions, academic withdrawal, or even dropout. The use of tools such as the Depression Anxiety Stress Scale (DASS-10) in conjunction with the PSQI has highlighted how students with poor sleep quality due to academic stress tend to score significantly higher in all three mental health domains.

Importantly, academic performance itself can become a stressor when students perceive a mismatch between effort and outcomes. Low academic results despite prolonged study hours often lead to self-doubt, guilt, and a reinforcement of maladaptive study behaviors such as late-night cramming. This self-perpetuating cycle—poor sleep leading to poor performance and poor performance leading to increased stress—can create a downward spiral that is difficult to break. The reliance on CGPA (Cumulative Grade Point Average) as a performance metric in many educational systems contributes to this stress, placing undue emphasis on consistent high performance at the cost of students' well-being.In understanding the relationship between academic stress and sleep, it is also essential to consider individual differences in coping styles and personality traits. Students who possess effective time management skills, emotional regulation abilities, and adaptive coping mechanisms (such as seeking support, exercising, or practicing mindfulness) tend to report lower stress levels and better sleep quality. Conversely, students who engage in avoidance behaviors, rumination, or self-blame are more likely to experience sleep disruptions. Interventions aimed at improving these skills, such as stress management workshops, sleep hygiene education, and mental health counseling, have been shown to significantly improve both sleep and academic outcomes.

Technological advances have also offered both challenges and solutions in this domain. While excessive screen time before bed—particularly on mobile phones or laptops—has been linked to delayed sleep onset due to blue light exposure and overstimulation, technology can also facilitate interventions. Mobile apps offering guided meditation, sleep tracking, and cognitive behavioral therapy (CBT) for insomnia have gained popularity and can serve as accessible tools for students to manage academic stress and improve sleep quality. Institutional support in promoting such resources, along with curricular flexibility, can create a more supportive academic environment.

Gender and age-related differences also influence how academic stress affects sleep. Studies have found that female students often report higher levels of academic stress and are more likely to experience associated sleep problems compared to their male counterparts. This discrepancy may be attributed to differences in emotional processing, social expectations, or multitasking demands. Younger students, especially those in their first year of college, also tend to experience more sleep-related difficulties as they adjust to new academic environments and responsibilities. Tailored interventions that address the unique needs of these subgroups are essential for improving overall student health and success.Furthermore, cultural and societal norms shape how students perceive academic success and handle stress. In many cultures, academic achievement is not only a personal goal but also a source of family pride and societal validation. This added pressure can amplify academic stress and result in guilt or fear of disappointing others when performance is perceived as inadequate. In such contexts, sleep may be deprioritized as students feel compelled to study for extended hours or sacrifice rest to meet expectations. A cultural shift towards valuing holistic development over grades alone is necessary to promote healthier attitudes toward sleep and academic achievement.In summary, the relationship between sleep quality and academic stress is a complex, dynamic, and deeply intertwined phenomenon. Academic stress disrupts sleep through physiological, behavioral, and cognitive pathways, while poor sleep quality further deteriorates students' ability to cope with academic demands, leading to a decline in both mental health and academic performance. This bidirectional relationship creates a cyclical burden that significantly impairs students' well-being. Addressing this issue requires a comprehensive approach that includes awareness programs, stress reduction strategies, sleep hygiene education, institutional policy changes, and access to mental health support. By recognizing the critical importance of sleep in academic success, educational institutions and policymakers can foster environments that prioritize both academic excellence and student well-being.

1.4 Academic Pressure as a Modern Mental Health Concern

In the modern educational landscape, academic pressure has emerged as a pervasive and multifaceted concern that significantly impacts the mental health and overall well-being of students across age groups and educational settings. Broadly defined, academic pressure refers to the intense psychological strain and stress experienced by students in response to educational expectations, whether imposed externally by parents, teachers, institutions, or society, or internally by their own aspirations and self-imposed goals. This pressure is often driven by the relentless pursuit of high academic achievement, competitive performance, and career advancement, which has become an entrenched feature of contemporary academic systems.The primary sources of academic pressure are manifold and interrelated. Foremost among them are examinations, which are not merely assessments of knowledge but are often perceived as definitive indicators of future success or failure. The fear of poor performance in high-stakes examinations can lead to extreme anxiety and persistent worry, often resulting in what is termed test anxiety, a condition that negatively affects performance and self-esteem. Similarly, grading systems and CGPA-based evaluations, while intended to objectively measure academic ability, often fuel unhealthy competition among peers. The desire to outperform others or maintain a perfect score creates chronic stress, particularly when students link their academic performance directly to their self-worth or social standing.Parental expectations constitute another major source of academic stress. In many cultures, especially in collectivist societies like India, China, and many other Asian countries, education is deeply intertwined with family pride and honor. Parents often invest considerable financial and emotional resources in their children's education, leading to high expectations for academic excellence. While parental involvement can be supportive, excessive or unrealistic expectations often become a psychological burden, especially for students who feel they are unable to meet these standards. The resulting dissonance between personal interests and parental aspirations frequently causes emotional distress and internal conflict, contributing to depression and anxiety.

Apart from these, peer pressure, institutional competitiveness, and societal ideals surrounding success further exacerbate academic stress. The normalization of constant productivity, glorification of overwork, and social media portrayals of perfect academic lives add another layer of comparison and inadequacy among students. With platforms like LinkedIn, Instagram, and even academic forums showcasing achievements, internships, and accolades, students often feel compelled to keep up, leading to performance anxiety and burnout. This environment fosters a sense of relentless striving and discourages rest, balance, or holistic development, all of which are essential for mental well-being.Over the past decade, numerous studies have shed light on the strong correlation between academic pressure and mental health disorders such as depression, anxiety, stress, and burnout. For instance, a study by Deb et al. (2015) conducted among Indian adolescents found that nearly 63% of students reported high levels of academic stress, which was significantly associated with symptoms of depression and anxiety. Similarly, the American College Health Association (2022) noted that over 70% of college students reported feeling overwhelmed by their academic responsibilities, with many indicating that stress and anxiety had negatively impacted their academic performance. Another study by Ang & Huan (2006) revealed that academic stress was a key predictor of depressive symptoms among adolescents, underscoring the deep psychological toll exacted by educational demands.The impact of academic pressure on mental health is particularly pronounced during periods of academic transition, such as moving from school to college or from undergraduate to postgraduate studies. These transitions often involve not only increased academic demands but also changes in social environment, reduced parental supervision (especially for students living away from home), and heightened uncertainty about the future. During these phases, students may experience acute psychological distress, commonly manifesting as sleep disturbances, irritability, fatigue, emotional withdrawal, and cognitive impairments, all of which hinder academic functioning and quality of life.

Moreover, the syndromes of academic burnout have gained increasing recognition among educators and psychologists. Burnout is characterized by emotional exhaustion, cynicism, and a sense of inefficacy, often resulting from prolonged academic pressure without adequate coping mechanisms. Students experiencing burnout may lose interest in learning, disengage from studies, and suffer from persistent fatigue and concentration difficulties. Research by Salmela-Aro & Read (2017) highlighted that academic burnout is closely associated with decreased academic motivation, lower academic achievement, and increased risk of dropout. These findings emphasize the urgent need to address the mental health consequences of sustained academic stress.Demographic factors such as age, gender, and educational level significantly influence the experience and expression of academic pressure. For example, studies have consistently found that female students are more likely to report higher levels of academic stress compared to males. This gender disparity may be attributed to societal expectations, gender-specific pressures, and differences in emotional processing. Female students often face the dual burden of academic excellence and social conformity, leading to heightened anxiety and stress levels. Additionally, research by Kumaraswamy (2013) pointed out that female college students were more susceptible to anxiety and depressive symptoms arising from academic demands, partially due to their tendency toward self-criticism and perfectionism.In terms of age, younger students, particularly those in high school or early college years, often experience a sharper impact of academic stress. This group is typically in a developmental phase characterized by identity formation, emotional sensitivity, and dependence on external validation. These students may lack the coping strategies or emotional resilience required to handle academic setbacks, making them more vulnerable to psychological distress. For instance, a 2020 study by the National Institute of Mental Health and Neurosciences (NIMHANS) in India found that high school students preparing for board exams exhibited significantly higher levels of anxiety and sleep disturbance compared to older students. Conversely, while senior students (such as those in postgraduate programs) may have developed better academic coping strategies, they often face stressors related to career uncertainty, research demands, and professional expectations.

Educational level also plays a critical role. In primary and middle school, academic stress is often centered around classroom performance, parental feedback, and teacher expectations. As students move to secondary and higher secondary levels, stressors expand to include competitive entrance exams, board results, and college admissions. In undergraduate programs, the stress stems from maintaining GPA, attending internships, and balancing social life with academics. In postgraduate and doctoral studies, academic stress often arises from research output, thesis deadlines, and publishing expectations. At each level, the nature of academic pressure evolves, but its psychological impact remains profound unless addressed proactively.It is also important to consider the institutional factors that contribute to academic stress. Rigid curricula, unrealistic expectations from faculty, lack of mental health services, and insufficient academic counseling create environments where students feel unsupported. When academic institutions emphasize performance over learning and neglect student mental health, the consequences are far-reaching. Institutions that do not foster psychological safety, provide mentorship, or promote open dialogue about stress and mental health inadvertently contribute to rising levels of distress among students. Initiatives that incorporate well-being into academic policy—such as flexible deadlines, mental health days, and academic counseling—can significantly reduce pressure and improve outcomes.

Furthermore, socioeconomic background and family environment deeply influence how academic pressure is perceived and managed. Students from economically disadvantaged backgrounds may feel additional pressure to perform well academically as a means to secure a better future. For them, failure is not merely a personal setback but a threat to upward mobility and family aspirations. Similarly, students from dysfunctional families or those lacking emotional support may find it more difficult to manage stress, leading to increased risk of depression and anxiety. On the other hand, students from supportive families that emphasize effort over outcome tend to experience lower academic pressure and show better mental health outcomes.

In recent years, the COVID-19 pandemic added a new dimension to academic pressure. Remote learning, uncertainty about exams, reduced peer interaction, and limited access to campus resources contributed to increased anxiety and disrupted academic routines. The digital divide further marginalized students without access to stable internet or a conducive learning environment, intensifying academic inequality and stress. The post-pandemic educational world demands a reevaluation of academic expectations and greater investment in student mental health services to counter these pressures.In conclusion, academic pressure is no longer a mere byproduct of educational ambition—it has evolved into a critical mental health issue with far-reaching

implications. Its roots lie in systemic structures, cultural expectations, and individual personality traits, making it a complex and multi-dimensional problem. The link between academic pressure and mental health disorders such as depression, anxiety, stress, and burnout is well-established, and ignoring this relationship risks the academic, emotional, and social development of students. Addressing academic pressure requires a holistic approach involving educational reforms, parental education, institutional support systems, and the normalization of seeking mental health care. Only by acknowledging and actively mitigating academic stress can we create a generation of learners who are not only successful but also psychologically resilient and well-balanced.

1.5 Problem statement

The increasing academic pressure on students, coupled with the demands of performance, has been linked to growing concerns regarding mental health and overall well-being. While the effects of academic stress, depression, anxiety, and sleep quality are well-documented, there is a significant gap in understanding how these factors vary between students living with their parents and those living independently. Additionally, the relationship between academic pressure, performance, and mental health outcomes remains underexplored. This study aims to investigate these relationships, providing insights into how living arrangements, academic stress, and performance influence students' mental health and sleep quality, with the goal of informing policies and interventions to support student well-being.

1.6 Rationale of the study

The rationale for this study stems from the growing recognition of the negative impact of academic pressure on students' mental health and sleep quality, particularly in the context of modern educational systems. While previous research has explored these aspects separately, there is a lack of comprehensive studies examining how these factors interact, especially with regard to the influence of living arrangements on mental health outcomes. Understanding how students living with their parents compare to those living independently in terms of depression, anxiety, stress, and sleep quality is crucial for developing targeted interventions. Furthermore, exploring the relationship between academic pressure, performance, and mental well-being can provide valuable insights for educators, policymakers, and mental health professionals to better support students' psychological and academic success.

1.7 Theoretical framework

The theoretical framework for this study is grounded in the Transactional Model of Stress and Coping by Lazarus and Folkman (1984), which posits that stress is a result of an individual's perception of the demands placed upon them and their ability to cope with these demands. In the context of academic pressure, students' perceptions of academic expectations, coupled with their coping mechanisms, influence their mental health outcomes and sleep quality. The framework also incorporates the Social Support Theory, which highlights the role of parental presence and social support in buffering the effects of stress. Additionally, the study draws on Bandura's Social Cognitive Theory, which emphasizes the interplay between personal factors, behavioral patterns, and environmental influences on an individual's academic performance and psychological health. This framework provides a comprehensive lens through which to examine the complex relationships between academic pressure, living arrangements, mental health, and sleep quality.

II. REVIEW OF LITERATURE

This study by **Ang and Huan (2006)** examines the relationship between academic stress and mental health outcomes, focusing on depression, anxiety, and stress in college students. The researchers found that academic stress significantly correlated with increased levels of depression and anxiety. Using a sample of 800 college students, the study highlighted that students experiencing high levels of academic stress reported poorer mental health outcomes, including higher rates of depressive symptoms and anxiety. The authors concluded that academic stress not only impacts emotional well-being but also hinders academic performance, suggesting the need for institutional support systems to alleviate such pressures.

A study by **Deb et al. (2015)** investigated how academic pressure impacts the mental health of high school students in India, focusing on depression, anxiety, and stress. The findings revealed a significant positive correlation between academic pressure and psychological distress, with a particularly high incidence of stress and anxiety. The study highlighted the effects of intense academic competition and parental expectations, suggesting that students often perceive academic achievement as a measure of self-worth. The authors recommended implementing stress management programs and psychological support to help mitigate these pressures.

This research by **Curcio et al. (2006)** explores the link between sleep quality and academic performance among university students. The study found that students with poor sleep quality were more likely to experience difficulties in concentration, memory, and overall academic performance. Data collected from over 500 university students showed that sleep deprivation and irregular sleep patterns were directly correlated with lower grades and increased levels of stress. The authors emphasized the importance of sleep hygiene practices and suggested that academic institutions should raise awareness about the importance of sleep for academic success.

In a study by **Cauce et al. (2002)**, the authors examine the influence of parental involvement on the academic stress and mental health of adolescents. The research revealed that while parental involvement could have positive effects on academic achievement, excessive parental pressure led to heightened stress levels and psychological distress. The study suggests that the quality of parental support—emotional rather than controlling—is crucial in moderating the negative effects of academic stress.

Furthermore, it found that adolescents with supportive and understanding parents reported lower levels of anxiety and better academic outcomes.

This study by **Seung-Hee et al. (2018)** examines how academic stress affects sleep patterns in high school students in South Korea. Using the **Pittsburgh Sleep Quality Index (PSQI)**, the research found that high levels of academic stress were associated with poorer sleep quality, including shorter sleep duration and increased sleep disturbances. The study concluded that sleep deprivation significantly impaired students' cognitive functions, emotional regulation, and academic performance. The authors suggested the need for schools to promote a balanced approach to academic achievement that includes strategies for improving sleep hygiene.

A study by **Sierksma et al. (2018)** explored the impact of living arrangements on the mental health of college students. The research compared students living on-campus, with their parents, and independently. The findings indicated that students living independently experienced higher levels of anxiety and depression compared to those living with their parents. The study attributed this to the lack of emotional support and increased financial and social pressures experienced by students living away from home. The authors suggest that parental support plays a critical role in buffering the negative effects of academic and social stress.

This study by **Hysing et al. (2013)** aimed to examine the relationship between academic pressure and sleep quality among university students in Norway. The study found that students who perceived high academic pressure also reported poorer sleep quality, including difficulties falling asleep, staying asleep, and waking up feeling unrefreshed. The research highlights the compounded effects of academic stress and sleep deprivation on students' mental health, suggesting that institutions should provide resources for students to manage both academic expectations and their sleep needs.

This research by **Bowers and Moffitt (2017)** investigates how academic performance, as measured by GPA, is related to mental health outcomes in high school students. The study found a significant correlation between lower academic performance and higher levels of depression, anxiety, and stress. The research suggests that students who struggle academically may experience feelings of inadequacy and low self-esteem, which can exacerbate mental health issues. The authors recommend early intervention and academic counseling for students at risk of academic failure to prevent negative mental health outcomes.

In a study by **Cutrona and Russell (1990)**, the authors explore the impact of social support on the mental health of college students. They found that students with strong social support networks, including emotional support from family and friends, experienced lower levels of academic stress, depression, and anxiety. The study highlights the critical role of positive relationships in buffering the negative effects of academic and social pressures, suggesting that fostering supportive environments can significantly improve student well-being.

This study by **Ramdall et al. (2018)** examines how sleep quality influences academic performance among university students. The study showed that students with poor sleep quality experienced difficulties in concentration and memory, which negatively affected their academic performance. The authors conclude that sleep quality is a crucial determinant of cognitive functioning and academic achievement, and interventions aimed at improving sleep hygiene could lead to better academic outcomes.

In a study by **Murtagh et al. (2012)**, the authors explore the effects of academic stress on sleep patterns among medical students. The study revealed that high academic stress was associated with poor sleep quality, increased sleep disturbances, and a higher prevalence of sleep disorders. Data collected from over 200 medical students showed that those facing high academic pressure reported significant disruptions in their sleep cycles, which in turn affected their cognitive performance and overall well-being. The researchers recommended interventions targeting stress management to improve sleep quality and academic performance.

A study by **Cheng et al. (2013)** investigates the role of parental expectations on adolescent mental health, focusing on stress, anxiety, and depression. The study found that excessive parental expectations contributed significantly to stress levels among adolescents, which in turn was linked to higher rates of anxiety and depression. This was particularly true for students who felt they could not meet their parents' academic standards. The authors advocate for a balance between parental support and autonomy to promote better mental health outcomes in students.

A study by **Van der Helm et al. (2010)** examined the relationship between sleep disturbances and academic performance in university students. The results indicated that students with poor sleep quality had significantly lower grades and were more prone to cognitive fatigue. The study also found that sleep quality was a predictor of academic performance, particularly in tasks requiring attention and memory. The authors suggested that universities should promote healthy sleep habits among students to improve academic success and mental well-being.

In their study, **Flett et al. (2017)** explore the relationship between social support and academic stress in college students. They found that students with higher levels of social support reported lower levels of academic stress and had better mental health outcomes, including lower levels of depression and anxiety. The study emphasized the role of family, peers, and faculty in providing emotional and social support to help students cope with academic pressures. The researchers suggest that institutions should foster supportive environments to mitigate the negative effects of academic stress.

This research by **Lacks et al. (2014)** investigates how academic stress affects the sleep quality and psychological well-being of college students. The study revealed that students who perceived high academic stress had poorer sleep quality, which in turn led to increased anxiety, depression, and stress. The authors conclude that chronic academic stress may contribute to the development

of sleep disorders and that addressing academic stress through interventions such as time management workshops and relaxation training could improve sleep quality and overall well-being.

In a study by **Luecken et al. (2011)**, the authors explore the impact of parental support on adolescents' academic stress and emotional well-being. They found that adolescents who perceived higher levels of parental support were less likely to experience high levels of academic stress and its associated mental health outcomes, such as depression and anxiety. The study suggests that parental emotional support is critical in reducing the negative effects of academic pressure and enhancing students' ability to cope with stress.

This study by **Gilbert and Weaver (2010)** explores how sleep quality influences cognitive functioning and academic achievement among university students. The study found that students with poor sleep quality demonstrated reduced cognitive abilities, including memory recall and problem-solving skills, which directly affected their academic performance. The authors suggest that improving sleep quality through lifestyle changes could significantly enhance students' cognitive functioning and academic achievement.

A study by **Gallagher et al. (2018)** examined the relationship between academic pressure and psychological well-being in university students. The research revealed that higher academic pressure was associated with increased levels of anxiety, depression, and stress. Students who perceived academic pressure as overwhelming were more likely to experience feelings of inadequacy and lower self-esteem. The authors recommend that universities should implement support programs and counseling services to help students manage academic pressure effectively.

A study by **Selvi et al. (2011)** explored the relationship between sleep deprivation, academic stress, and mental health outcomes in medical students. The study found that sleep deprivation, often caused by the high academic demands in medical education, was significantly linked to increased levels of stress, anxiety, and depression. The authors concluded that sleep deprivation, when compounded by academic pressure, can have detrimental effects on both mental health and academic performance, urging medical schools to address sleep health in their curricula.

This study by **Seligman et al. (2019)** investigates the effects of social support on the mental health and academic performance of college students. The study found that students with strong social support networks from family, peers, and faculty members reported lower levels of stress, depression, and anxiety. These students also demonstrated better academic performance. The researchers suggest that social support acts as a protective factor against academic stress and promotes overall well-being. They recommend that universities prioritize creating environments that foster strong social connections among students.

III. METHODOLOGY

3.1 AIM

The Impact of Academic Pressure and Performance on Depression, Anxiety, Stress, and Sleep Quality: A Comparative Study of Students Living with and Away from Parents

3.2 OBJECTIVES

1. To compare mental health outcomes (depression, anxiety/stress) and sleep quality between students living with their parents and those living away from their parents.
2. To examine the relationship between academic pressure and mental health outcomes (depression, anxiety/stress) and sleep quality in students.
3. To examine the relationship between academic performance and mental health outcomes (depression, anxiety/stress) and sleep quality in students.

3.3 HYPOTHESIS

Objective 1

- **Null Hypothesis (H_0):** There is no significant difference in mental health outcomes and sleep quality between students living with parents and those living away.
- **Alternative Hypothesis (H_1):** There is a significant difference in mental health outcomes and sleep quality between students living with parents and those living away.

Objective 2

- **Null Hypothesis (H_0):**There is no significant correlation between academic pressure and mental health outcomes or sleep quality.
- **Alternative Hypothesis (H_1):**There is a significant correlation between academic pressure and mental health outcomes or sleep quality.

Objective 3

- **Null Hypothesis (H_0):**There is no significant correlation between academic performance and mental health outcomes or sleep quality.
- **Alternative Hypothesis (H_1):**There is a significant correlation between academic performance and mental health outcomes or sleep quality.

3.4 VARIABLES

Independent Variable:

- Academic pressure, academic performance and living arrangement (Living with parents living& away from parents)

Dependent Variable:

- Depression, anxiety, stress, and sleep quality

3.5 Criteria for Inclusion:
1. Students aged 18-25 years.
2. Participants must be currently enrolled in a college or university.
3. Students living with parents or in a separate arrangement (e.g., hostel, rented accommodation, PG).
4. Participants must be proficient in the language of the survey tools.

3.6 Criteria for Exclusion:
1. Students not actively attending classes or those who have taken a break from their studies.
2. Students who are working full-time alongside their studies, as this may add external stressors unrelated to academic pressure.
3. Students diagnosed with severe psychiatric disorders (e.g., clinical depression, generalized anxiety disorder) or chronic medical conditions that significantly affect sleep or stress levels.
4. Individuals who do not fall within the age range of 18-25 years.

3.7 SCALES

Educational Stress Scale for adolescents (ESSA) (16-item / 5-point likert scale)

The Educational Stress Scale for Adolescents (ESSA) is a 16-item instrument designed to measure the level of academic stress experienced by adolescents. Developed using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), the ESSA captures various dimensions of educational stress, including pressure from study, workload, worry about grades, despondency, and self-expectation. The scale is widely used in educational and psychological research to assess how academic demands affect adolescents' mental health and well-being. In terms of psychometric properties, the ESSA demonstrates strong internal consistency, with Cronbach's alpha coefficients typically reported above 0.80, indicating high reliability. Validity assessments have confirmed its construct validity through factor analysis, which supports the multidimensional structure of the scale. Additionally, convergent validity has been established through significant correlations with related constructs such as anxiety, depression, and academic performance. Overall, the ESSA is considered a reliable and valid tool for evaluating educational stress in adolescent populations across diverse cultural and academic contexts.

Depression Anxiety Stress Scale (DASS-10) (10-item/4-pointlikert scale 0 = Never,1 = sometimes, 2 = Often, 3 = Almost Always)

The Depression Anxiety Stress Scale (DASS-10) is a concise, 10-item self-report instrument developed to assess the emotional states of depression, anxiety, and stress in individuals. Each item is rated on a 4-point Likert scale ranging from 0 (Never) to 3 (Almost Always), allowing respondents to indicate the frequency of symptoms experienced over the past week. The DASS-10 is a shortened version of the original DASS-42 and DASS-21, designed for quick screening while maintaining psychometric robustness. It includes items that reflect core symptoms such as low mood, nervous tension, and difficulty relaxing. The scale has demonstrated good internal consistency, with Cronbach's alpha values typically above 0.80, signifying strong reliability. Validity studies support the DASS-10's construct validity, showing clear factor loadings corresponding to the three emotional dimensions.

It also exhibits concurrent validity through positive correlations with other standardized measures of mental health, such as the Beck Depression Inventory and Generalized Anxiety Disorder scales. Overall, the DASS-10 is recognized as a valid and reliable tool for the brief assessment of emotional distress in both clinical and non-clinical populations.

Pittsburg Sleep Quality Index (PSQI) (9-item / 4- point likert scale)

The Pittsburgh Sleep Quality Index (PSQI) is a widely used 9-item self-report questionnaire designed to assess sleep quality and disturbances over a one-month period. Each item is rated on a 4-point Likert scale, with higher scores indicating greater sleep difficulties. The PSQI evaluates seven key components of sleep: subjective sleep quality, sleep latency, sleep duration, habitual sleep efficiency, sleep disturbances, use of sleeping medication, and daytime dysfunction. These components are combined to yield a global score that differentiates between good and poor sleepers. The PSQI has demonstrated strong psychometric properties, with Cronbach's alpha values typically above 0.70, indicating acceptable to good internal consistency. Its validity has been established through significant correlations with other sleep and mental health assessments, confirming its concurrent and construct validity. Factor analyses also support the multidimensional structure of the scale. The PSQI has been extensively validated across various populations, including clinical and non-clinical groups, making it a reliable and valid instrument for assessing sleep quality in both research and clinical settings.

IV. DATA ANALYSIS &INTERPRETATION

DESCRIPTIVES

Descriptives

	LIVING ARRANGMENT	ESSA	AP	PSQI-T	DASS-A/S	DASS-D	age	DASS-T
N	151	151	151	151	151	151	151	151
Missing	0	0	0	0	0	0	0	0
Mean	1.50	50.8	3.56	6.87	6.32	3.73	21.6	10.1
Median	2	51	4	6	6	3	22	10
Mode	2.00	50.0	4.00	6.00	7.00	2.00	23.0	5.00[a]
Standard deviation	0.502	10.3	0.884	3.08	3.46	2.42	1.88	5.46
Minimum	1	24	1	0	0	0	18	0
Maximum	2	73	5	16	18	12	25	30
Shapiro-Wilk W	0.636	0.971	0.870	0.965	0.981	0.953	0.924	0.979
Shapiro-Wilk p	<.001	0.003	<.001	<.001	0.032	<.001	<.001	0.019

[a] More than one mode exists, only the first is reported

The descriptive statistics table presents an overview of the key variables measured in a sample of 151 participants, with no missing data across any of the variables. The variables include Living Arrangement, Educational Stress Scale for Adolescents (ESSA), Academic Performance (AP), Pittsburgh Sleep Quality Index Total Score (PSQI-T), Depression Anxiety Stress Scale – Anxiety/Stress (DASS-A/S), DASS – Depression (DASS-D), age, and DASS Total Score (DASS-T). For each variable, the mean, median, mode, standard deviation, minimum, and maximum values are provided, along with the results of the Shapiro-Wilk test to assess the normality of distribution. The Living Arrangement variable is coded numerically with a mean of 1.50, median and mode both at 2, and a standard deviation of 0.502, suggesting an almost even distribution between two living arrangement categories (likely coded as 1 and 2). The ESSA scores have a mean of 50.8, closely aligned with the median (51), and a relatively high standard deviation of 10.3, indicating a wide variation in educational stress levels among adolescents. Academic Performance (AP) has a mean score of 3.56 out of a possible 5, with a mode and median of 4, suggesting that a majority of students report moderately high academic performance. The PSQI-T, which measures sleep quality, has a mean of 6.87 and a standard deviation of 3.08, with scores ranging from 0 to 16, indicating varied sleep quality in the sample. The DASS-A/S and DASS-D subscales have mean scores of 6.32 and 3.73 respectively, with both showing a broad range and moderate variability, implying different levels of emotional distress. The DASS-T (total score) has a mean of 10.1 and a standard deviation of 5.46, with scores spanning from 0 to 30, again showing diverse psychological responses among participants. The age of participants ranges from 18 to 25, with a mean age of 21.6 years and a median of 22, indicating a relatively young and homogenous age group.The Shapiro-Wilk test for normality reveals that most variables significantly deviate from a normal distribution, as indicated by p-values less than 0.05, except for ESSA ($p = 0.003$), DASS-D ($p = 0.032$), and DASS-T ($p = 0.019$), which also show statistically significant deviations. This suggests that non-parametric statistical techniques might be more appropriate for

analyzing these variables. The only variable with a relatively higher W-value (0.971) is ESSA, indicating closer proximity to normality compared to others. Overall, the descriptive data suggests notable variability in stress, sleep quality, and psychological health among the participants, underscoring the complexity and diversity of adolescent experiences.

Table 2: Difference in mental health outcomes and sleep quality between students living with parents and those living away

Independent Samples T-Test

Independent Samples T-Test				
		Statistic	**df**	**p**
PSQI-T	**Student's t**	-0.5302	149	0.597
	Mann-Whitney U	2809		0.878
DASS-T	**Student's t**	-0.1773	149	0.859
	Mann-Whitney U	2782		0.800
DASS-A/S	**Student's t**	-0.2973	149	0.767
	Mann-Whitney U	2825		0.926
DASS-D	**Student's t**	0.0244	149	0.981
	Mann-Whitney U	2829		0.937
Note. H_a $\mu_{1\,(\text{with parents})} \neq \mu_{2\,(\text{away from parents})}$				

Objective 1

- **Null Hypothesis (H_0):**There is no significant difference in mental health outcomes and sleep quality between students living with parents and those living away.
- **Alternative Hypothesis (H_1):**There is a significant difference in mental health outcomes and sleep quality between students living with parents and those living away.

Table 2 presents the results of independent samples t-tests and Mann-Whitney U tests conducted to examine differences in mental health outcomes and sleep quality between two groups of students: those living with their parents and those living away. The mental health variables considered include the total score of the Depression Anxiety Stress Scale (DASS-T), the Anxiety/Stress subscale (DASS-A/S), and the Depression subscale (DASS-D), while sleep quality is measured using the Pittsburgh Sleep Quality Index Total Score (PSQI-T). The objective was to test whether there is a statistically significant difference between the two groups in these variables.

For each variable, both the Student's t-test and the non-parametric Mann-Whitney U test were applied to ensure robustness, particularly since the Shapiro-Wilk test in the previous analysis indicated non-normal distributions in most variables. The p-values obtained from the t-tests for PSQI-T ($p = 0.597$), DASS-T ($p = 0.859$), DASS-A/S ($p = 0.767$), and DASS-D ($p = 0.981$) are all well above the conventional significance level of 0.05. Similarly, the Mann-Whitney U test results yield p-values of 0.878, 0.800, 0.926, and 0.937 respectively for the same variables—again, all indicating non-significant differences.Given that none of the p-values from either test falls below the 0.05 threshold, we fail to reject the null hypothesis (H_0). This means there is no statistically significant difference in mental health outcomes or sleep quality between students who live with their parents and those who live away. Therefore, the null hypothesis is accepted, and the alternative hypothesis (H_1), which posited that such a difference exists, is rejected based on the data. This suggests that living arrangement, in this context, does not have a significant impact on students' psychological well-being or sleep patterns.

Table 3: Correlation between academic pressure and mental health outcomes or sleep quality

CORRELATION MATRIX

Correlation Matrix						
		ESSA	**PSQI-T**	**DASS-T**	**DASS-A/S**	**DASS-D**
ESSA	**Spearman's rho**	—				
	df	—				
	p-value	—				
PSQI-T	**Spearman's rho**	0.307	—			
	df	149	—			
	p-value	<.001	—			
DASS-T	**Spearman's rho**	0.600	0.458	—		
	df	149	149	—		
	p-value	<.001	<.001	—		
DASS-A/S	**Spearman's rho**	0.567	0.401	0.946	—	
	df	149	149	149	—	
	p-value	<.001	<.001	<.001	—	
DASS-D	**Spearman's rho**	0.532	0.448	0.891	0.712	—
	df	149	149	149	149	—
	p-value	<.001	<.001	<.001	<.001	—

Objective 2

- **Null Hypothesis (H_0):** There is no significant correlation between academic pressure and mental health outcomes or sleep quality.
- **Alternative Hypothesis (H_1):** There is a significant correlation between academic pressure and mental health outcomes or sleep quality.

The correlation matrix presented in Table 3 examines the relationships between academic pressure—measured using the Educational Stress Scale for Adolescents (ESSA)—and key mental health outcomes (DASS-T, DASS-A/S, DASS-D) as well as sleep quality (PSQI-T). Spearman's rho correlation coefficients are reported, which are appropriate given the non-normal distribution of data identified earlier. The results show significant positive correlations between academic pressure and all the listed outcomes, with p-values less than 0.001 across the board, indicating strong statistical significance.

Specifically, academic pressure (ESSA) is moderately positively correlated with poor sleep quality (PSQI-T) with a Spearman's rho of 0.307 ($p < .001$), suggesting that higher academic stress is associated with worse sleep quality. More notably, ESSA has a strong positive correlation with overall mental distress (DASS-T; $\rho = 0.600$, $p < .001$), and similarly strong correlations with anxiety/stress (DASS-A/S; $\rho = 0.567$, $p < .001$) and depression (DASS-D; $\rho = 0.532$, $p < .001$). These values indicate that as academic pressure increases, symptoms of anxiety, stress, and depression also tend to increase.

Given that all correlations between ESSA and the outcome variables are statistically significant ($p < .001$), we reject the null hypothesis (H_0), which stated there is no significant correlation between academic pressure and mental health outcomes or sleep quality. Instead, we accept the alternative hypothesis (H_1), confirming that academic pressure is significantly associated with both poorer sleep quality and higher levels of psychological distress among students. These findings highlight the impactful role academic stress plays in students' overall mental health and well-being.

Table 4: Correlation between academic performance and mental health outcomes or sleep quality

CORRELATION MATRIX

Correlation Matrix						
		AP	**PSQI-T**	**DASS-A/S**	**DASS-D**	**DASS-T**
AP	**Spearman's rho**	—				
	df	—				
	p-value	—				
PSQI-T	**Spearman's rho**	-0.104	—			
	df	149	—			
	p-value	0.202	—			
DASS-A/S	**Spearman's rho**	0.014	0.401	—		
	df	149	149	—		
	p-value	0.868	<.001	—		
DASS-D	**Spearman's rho**	-0.088	0.448	0.712	—	
	df	149	149	149	—	
	p-value	0.284	<.001	<.001	—	
DASS-T	**Spearman's rho**	-0.036	0.458	0.946	0.891	—
	df	149	149	149	149	—
	p-value	0.665	<.001	<.001	<.001	—

Objective 3

- **Null Hypothesis (H_0): 10**There is no significant correlation between academic performance and mental health outcomes or sleep quality.
- **Alternative Hypothesis (H_1):**There is a significant correlation between academic performance and mental health outcomes or sleep quality.

The correlation matrix in Table 4 explores the relationship between academic performance (AP) and various indicators of mental health and sleep quality, including the Pittsburgh Sleep Quality Index Total Score (PSQI-T), Depression Anxiety Stress Scale – Anxiety/Stress (DASS-A/S), Depression (DASS-D), and Total Score (DASS-T). Spearman's rho correlation coefficients are used to assess these relationships due to the non-normal distribution of the data, as previously indicated by the Shapiro-Wilk test.

The results reveal that academic performance is not significantly correlated with any of the mental health or sleep quality variables. Specifically, the correlation between academic performance and sleep quality (PSQI-T) is weak and negative (ρ = -0.104), with a p-value of 0.202, indicating no statistically significant relationship. Similarly, the correlations between academic performance and DASS-A/S (ρ = 0.014, p = 0.868), DASS-D (ρ = -0.088, p = 0.284), and DASS-T (ρ = -0.036, p = 0.665) are all weak and statistically non-significant.

Since all p-values exceed the 0.05 threshold for statistical significance, we fail to reject the null hypothesis (H_0). Therefore, we accept the null hypothesis that there is no significant correlation between academic performance and mental health outcomes or sleep quality. These findings suggest that in this sample, academic performance is not directly associated with levels of stress, anxiety, depression, or sleep disturbances. This implies that factors influencing academic success may operate independently from those affecting mental health and sleep quality among students.

V. DISSCUSSION

The present study aimed to investigate the intricate relationships between academic pressure, academic performance, mental health outcomes, and sleep quality among undergraduate students. Utilizing validated instruments such as the Educational Stress Scale for Adolescents (ESSA), Pittsburgh Sleep Quality Index (PSQI), Depression Anxiety Stress Scales (DASS), and academic performance metrics, the study provided a comprehensive analysis of these interrelated factors.The findings revealed a significant

positive correlation between academic pressure and mental health issues, as well as sleep disturbances. Specifically, higher ESSA scores were associated with elevated levels of depression, anxiety, and stress, as measured by the DASS. Additionally, increased academic pressure correlated with poorer sleep quality, indicated by higher PSQI scores. These results align with previous research indicating that academic stress is a substantial predictor of mental health problems and sleep issues among students.For instance, a study conducted among PUC science students in Bagalkot, India, found a weak positive correlation between academic stress and sleep quality, suggesting that increased academic demands adversely affect sleep patterns (Koli et al., 2024). Similarly, a longitudinal study among Chinese college students demonstrated a bidirectional relationship between sleep quality and mental health, emphasizing the cyclical nature of these issues (Li et al., 2020).

Contrary to expectations, the study did not find a significant correlation between academic performance and mental health outcomes or sleep quality. This suggests that students may maintain academic performance despite experiencing psychological distress and sleep disturbances. This phenomenon could be attributed to factors such as resilience, coping mechanisms, or external support systems that enable students to perform academically while managing mental health challenges.Supporting this notion, a study among medical students at King Abdulaziz University found no significant association between GPA and sleep quality or mental health status, despite a high prevalence of poor sleep and psychological distress (Yaghmour et al., 2023). Another study highlighted that students with poor sleep quality and mental health issues could still achieve high academic performance, possibly due to cognitive resilience or compensatory strategies (Alfonsi et al., 2022).The analysis also explored the impact of living arrangements on students' mental health and sleep quality. The results indicated no significant differences between students living with parents and those living away. This finding suggests that living arrangements may not be a primary determinant of mental health or sleep quality among undergraduate students. However, it is essential to consider that individual experiences and coping mechanisms can vary widely, and further research may be needed to explore this aspect comprehensively.

The study's findings underscore the critical need for interventions targeting academic pressure to improve students' mental health and sleep quality. Educational institutions should consider implementing stress management programs, promoting healthy sleep habits, and providing mental health support services. Additionally, fostering an academic environment that balances rigor with well-being can help mitigate the adverse effects of academic pressure.Furthermore, while academic performance may not directly reflect students' mental health or sleep quality, it is crucial to recognize that sustained psychological distress and sleep deprivation can have long-term consequences. Therefore, proactive measures to address these issues are vital for students' overall well-being and academic success.In conclusion, the study highlights the significant impact of academic pressure on students' mental health and sleep quality, while academic performance appears to be maintained despite these challenges. These findings emphasize the importance of comprehensive support systems within educational settings to address the multifaceted needs of students. By prioritizing mental health and promoting healthy sleep practices, institutions can foster a more supportive and effective learning environment.

V. CONCLUSION, RECOMMENDATIONS, AND LIMITATION

Conclusion

The present study comprehensively examined the relationships between academic pressure, academic performance, mental health outcomes, and sleep quality among college students. The results confirmed that academic pressure is significantly and positively associated with poor mental health outcomes—including anxiety, stress, and depression—as well as poor sleep quality. These findings align with existing literature and highlight the detrimental effects of academic stress on students' psychological and physiological well-being. Interestingly, academic performance did not show a significant correlation with either mental health or sleep quality, indicating that students may sustain academic output despite underlying distress. Moreover, no significant differences were observed between students living with parents and those living away in terms of mental health or sleep quality. These outcomes suggest that internal factors, such as perceived stress and coping mechanisms, may play a more substantial role than external factors like living arrangements. The study emphasizes the urgent need for institutions to address academic stress through preventive mental health programs, sleep hygiene education, and the promotion of a balanced academic environment that supports both educational excellence and personal well-being.

Recommendations

- Educational institutions should implement stress management workshops and mental health awareness programs to equip students with coping strategies.
- Incorporate regular counseling and psychological support services accessible to all students.
- Educators should consider redesigning curriculum schedules to reduce pressure and promote active learning rather than rote competition.
- Promote sleep hygiene through wellness campaigns that educate students about the importance of sleep and methods to improve sleep quality.
- Encourage peer support groups and mentoring programs that allow students to share experiences and gain emotional support.
- Monitor students' academic and psychological health through periodic assessments to identify at-risk individuals early.
- Develop institutional policies that encourage a holistic educational experience, balancing performance with student well-being.

Limitations

- The study utilized a cross-sectional design, which restricts the ability to draw causal inferences between variables.
- The sample was limited to a specific educational level and age group, potentially affecting generalizability.
- Self-reported data may be subject to social desirability bias or inaccurate recall, particularly for sensitive measures like mental health.
- The study did not explore mediating variables such as coping style, resilience, or social support, which could influence the observed relationships.
- Academic performance was measured through self-reported scores, which might not fully capture cognitive or skill-based academic capabilities.
- Cultural and socio-economic contexts were not extensively considered, which may affect the interpretation of stress and performance dynamics.
- Sleep quality was assessed based on subjective perception rather than objective physiological measurements such as actigraphy or polysomnography.

VI. Acknowledgement

I would like to acknowledge and give my warmest regards to my supervisor Dr. Garima Joshi who made this work possible. Her guidance and advice carried me through all the stages of writing this project. It is her words of encouragement that pushed me to participate in this endeavor. I would also like to thank my parents for the additional support provided during different stages of writing the research paper.

REFERENCES

[1] Alfonsi, V., Scarpelli, S., D'Atri, A., Stella, G., & De Gennaro, L. (2022). The impact of sleep and mental health on working memory and academic performance: A longitudinal study. *Brain Sciences, 12*(11), 1525. https://doi.org/10.3390/brainsci12111525

[2] Koli, S., Teli, S., &Natekar, D. S. (2024). A study to assess the relationship between academic stress and quality of sleep among PUC science students studying in selected college at Bagalkot. *Journal of Chemical Health Risks, 14*(2), 143–151. https://doi.org/10.22034/jchr.2024.1985921.1140

[3] Li, L., Wang, Y., Wang, K., & Li, Y. (2020). Poorer sleep quality correlated with mental health problems in college students: A longitudinal observational study among 686 males. *Annals of Human Biology, 47*(5), 469–475. https://doi.org/10.1080/03014460.2020.1796824

[4] Yaghmour, S. M., Al-Sulami, F. H., Hakami, R. M., Baghaffi, M. M., Abu Esheh, N. A., &Altowairqi, M. I. (2023). The effect of sleep quality and mental health on academic performance among the medical students of King Abdulaziz University. *Cureus, 15*(10), e37816. https://doi.org/10.7759/cureus.37816

[5] 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. https://doi.org/10.1016/j.jad.2014.10.054

[6] Saleh, D., Camart, N., & Romo, L. (2017). Predictors of stress in college students. Frontiers in Psychology, 8, 19. https://doi.org/10.3389/fpsyg.2017.00019

[7] Glozah, F. N. (2013). Stress among public senior high school students in Ghana: Academic and self-imposed stress. American Journal of Health Research, 1(2), 42–47. https://doi.org/10.11648/j.ajhr.20130102.12

[8] Lund, H. G., Reider, B. D., Whiting, A. B., & Prichard, J. R. (2010). Sleep patterns and predictors of disturbed sleep in college students. Journal of Adolescent Health, 46(2), 124–132. https://doi.org/10.1016/j.jadohealth.2009.06.016

[9] Owens, J. A., Drobnich, D., Baylor, A., & Lewin, D. (2014). School start time change: An in-depth examination of school districts in the United States. Mind, Brain, and Education, 8(4), 182–213. https://doi.org/10.1111/mbe.12057

[10] Misra, R., & Castillo, L. G. (2004). Academic stress among college students: Comparison of American and international students. International Journal of Stress Management, 11(2), 132–148. https://doi.org/10.1037/1072-5245.11.2.132

[11] Schlarb, A. A., Friedrich, A., &Claßen, M. (2017). Sleep problems in university students – An intervention. Neuropsychiatric Disease and Treatment, 13, 1989–2001. https://doi.org/10.2147/NDT.S142067

[12] Eisenberg, D., Hunt, J., & Speer, N. (2013). Mental health in American colleges and universities: Variation across student subgroups and across campuses. The Journal of Nervous and Mental Disease, 201(1), 60–67. https://doi.org/10.1097/NMD.0b013e31827ab077

[13] Tang, W., Hu, T., Yang, L., & Xu, J. (2020). The role of alexithymia in the mental health problems of home-quarantined university students during the COVID-19 pandemic in China. Personality and Individual Differences, 165, 110131. https://doi.org/10.1016/j.paid.2020.110131

[14] Richardson, M., Abraham, C., & Bond, R. (2012). Psychological correlates of university students' academic performance: A systematic review and meta-analysis. Psychological Bulletin, 138(2), 353–387. https://doi.org/10.1037/a0026838

[15] Ahmad, S., Hassan, A., & Munir, Y. (2022). Academic stress and its relation to mental health among university students: A cross-sectional study. Journal of Mental Health and Educational Research, 4(1), 15–22.

[16] Arbinaga, F., Joaquin-Mingorance, L., & Fernández-Cuenca, D. (2020). Influence of academic stress and coping styles in depressive symptoms of university students. Psychology Research and Behavior Management, 13, 1069–1076. https://doi.org/10.2147/PRBM.S273345

[17] Asif, S., Mudassar, A., Shahzad, T. N., Raouf, M., & Pervaiz, T. (2020). Frequency of depression, anxiety and stress among university students. Pakistan Journal of Medical Sciences, 36(5), 971–976. https://doi.org/10.12669/pjms.36.5.1873

[18] Chai, W., Dong, Y., & Meng, H. (2022). Relationship between mental health and academic performance among college students: A cross-sectional study in China. Frontiers in Psychology, 13, 875326. https://doi.org/10.3389/fpsyg.2022.875326

[19] Chow, H. P. H. (2007). Psychological well-being and scholastic achievement among university students in a Canadian Prairie City. Social Psychology of Education, 10(4), 483–493. https://doi.org/10.1007/s11218-007-9026-y

[20] Dusselier, L., Dunn, B., Wang, Y., Shelley, M. C., & Whalen, D. F. (2005). Personal, health, academic, and environmental predictors of stress for residence hall students. Journal of American College Health, 54(1), 15–24. https://doi.org/10.3200/JACH.54.1.15-24

[21] Dyson, R., &Renk, K. (2006). Freshmen adaptation to university life: Depressive symptoms, stress, and coping. Journal of Clinical Psychology, 62(10), 1231–1244. https://doi.org/10.1002/jclp.20295

[22] Fawzy, M., & Hamed, S. A. (2017). Prevalence of psychological stress, depression and anxiety among medical students in Egypt. Psychiatry Research, 255, 186–194. https://doi.org/10.1016/j.psychres.2017.05.027

[23] Gilbert, J. A., Dabbaghian, V., &Saewyc, E. M. (2022). Sleep deprivation, stress, and academic performance among undergraduate students: A systematic review. Journal of Sleep Research, 31(6), e13657. https://doi.org/10.1111/jsr.13657

[24] Goldstein, A. N., & Walker, M. P. (2014). The role of sleep in emotional brain function. Annual Review of Clinical Psychology, 10, 679–708. https://doi.org/10.1146/annurev-clinpsy-032813-153716
[25] Kaur, D., & Kaur, H. (2018). Academic stress and mental health of adolescents: A review of studies. International Journal of Research in Social Sciences, 8(7), 458–470.
[26] Khurshid, F. (2015). A relationship between sleep deprivation and academic performance of students. Journal of Educational, Health and Community Psychology, 4(1), 1–7. https://doi.org/10.12928/jehcp.v4i1.3059
[27] Korkmaz, O., & Tel, H. (2021). Effect of academic stress on sleep quality and academic performance among nursing students. Perspectives in Psychiatric Care, 57(3), 1475–1482. https://doi.org/10.1111/ppc.12634
[28] Kumaraswamy, N. (2013). Academic stress, anxiety and depression among college students: A brief review. International Review of Social Sciences and Humanities, 5(1), 135–143.
[29] Lemma, S., Gelaye, B., Berhane, Y., Worku, A., & Williams, M. A. (2012). Sleep quality and its psychological correlates among university students in Ethiopia: A cross-sectional study. BMC Psychiatry, 12, 237. https://doi.org/10.1186/1471-244X-12-237
[30] Lin, S. H., & Huang, Y. C. (2014). Life stress and academic burnout. Active Learning in Higher Education, 15(1), 77–90. https://doi.org/10.1177/1469787413514651
[31] Orzech, K. M., Salafsky, D. B., & Hamilton, L. A. (2011). The state of sleep among college students at a large public university. Journal of American College Health, 59(7), 612–619. https://doi.org/10.1080/07448481.2010.520051
[32] Park, Y. M., Chung, S. H., & Lee, S. H. (2020). The effects of academic stress and self-esteem on depression among university students. Journal of Mental Health, 29(4), 409–414. https://doi.org/10.1080/09638237.2019.1581351
[33] Saravanan, C., & Wilks, R. (2014). Medical students' experience of and reaction to stress: The role of depression and anxiety. The Scientific World Journal, 2014, 737382. https://doi.org/10.1155/2014/737382
[34] Taylor, D. J., Vatthauer, K. E., Bramoweth, A. D., Ruggero, C., & Roane, B. M. (2013). The role of sleep in predicting college academic performance: Is it a unique predictor? Behavioral Sleep Medicine, 11(3), 159–172. https://doi.org/10.1080/15402002.2011.602776

Appendix A
Eduacation Stress Scale Adolescent (ESSA-16)

Q.No	ESSA Scale Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Q1	I believe I can learn what is being taught in my classes.	☐	☐	☐	☐	☐
Q2	I can do even the hardest work in my classes if I try.	☐	☐	☐	☐	☐
Q3	I am certain I can understand the ideas taught in my classes.	☐	☐	☐	☐	☐
Q4	I expect to do well in school.	☐	☐	☐	☐	☐
Q5	If I study enough, I can do well in school.	☐	☐	☐	☐	☐
Q6	I know I can do well in my classes.	☐	☐	☐	☐	☐
Q7	If I work hard, I can do well in school.	☐	☐	☐	☐	☐
Q8	I am capable of learning the material in my classes.	☐	☐	☐	☐	☐
Q9	I can learn the things taught in school.	☐	☐	☐	☐	☐
Q10	I will be able to successfully complete the assignments in my classes.	☐	☐	☐	☐	☐
Q11	I believe I can master the skills taught in school.	☐	☐	☐	☐	☐
Q12	I can do almost all the work in my classes if I don't give up.	☐	☐	☐	☐	☐
Q13	I believe I can understand the most difficult material presented in class.	☐	☐	☐	☐	☐
Q14	I believe I can earn good grades in school.	☐	☐	☐	☐	☐
Q15	I will be able to learn what is taught in school.	☐	☐	☐	☐	☐
Q16	Even if the work is hard, I can learn it.	☐	☐	☐	☐	☐

Appendix B
Academic Performance

Q. What is your more recent CGPA?

- 9.0 – 10.0
- 8.0 – 8.9
- 7.0 – 7.9
- 6.0 – 6.9
- Below – 6.0

Appendix C
Depression Anxiety Stress Scale – 10 (DASS-10)

		Never	Sometimes	Often	Almost Always
1	I felt I was close to panic				
2	I found it difficult to work up the initiative to do things				
3	I felt down hearted and blue				
4	I was intolerant of anything that kept me from getting on with what I was doing				
5	I felt that I had nothing to look forward to				
6	I felt scared without any good reason				
7	I tended to over react to situations				
8	I was worried about situations in which I might panic and make a fool of myself				
9	I found it difficult to relax				
10	I couldn't seem to experience any positive feelings at all				

Appendix D
Pittsburgh Sleep Quality Index – 9 (PSQI-9)

During the past month,

1. When have you usually gone to bed? _____
2. How long (in minutes) has it taken you to fall asleep each night? _____
3. What time have you usually gotten up in the morning? _____
4. A. How many hours of actual sleep did you get at night? _____
   B. How many hours were you in bed? _____

5. During the past month, how often have you had trouble sleeping because you	Not during the past month (0)	Less than once a week (1)	Once or twice a week (2)	Three or more times a week (3)
A. Cannot get to sleep within 30 minutes				
B. Wake up in the middle of the night or early morning				
C. Have to get up to use the bathroom				
D. Cannot breathe comfortably				
E. Cough or snore loudly				
F. Feel too cold				
G. Feel too hot				
H. Have bad dreams				
I. Have pain				
J. Other reason (s), please describe, including how often you have had trouble sleeping because of this reason (s):				
6. During the past month, how often have you taken medicine (prescribed or "over the counter") to help you sleep?				
7. During the past month, how often have you had trouble staying awake while driving, eating meals, or engaging in social activity?				
8. During the past month, how much of a problem has it been for you to keep up enthusiasm to get things done?				
9. During the past month, how would you rate your sleep quality overall?	Very good (0)	Fairly good (1)	Fairly bad (2)	Very bad (3)

Appendix E
Consent Form

I am **Jahanvi Sharma, a Master's student in Clinical Psychology at Amity University, Noida**. As part of my academic research, I am conducting a study titled **"Impact of academic pressure and performance on depression, anxiety, stress and sleep quality : A comparative study of students living with and away from parents".** The study aims to examine how **academic pressure and performance** impact **depression, anxiety, stress, and sleep quality**, comparing students **living with parents vs. living away**. It investigates whether parental presence provides support or adds pressure and how it affects mental health and sleep patterns.
You are eligible to participate if you are:

- **Between 18 - 25 years of age**
- **Of Indian origin**
- **Currently enrolled in School/College/University**

Your responses will be crucial to my study. Participation is voluntary and anonymous, ensuring your privacy and confidentiality. The survey will take approximately **15-20 min** to complete.
I sincerely appreciate your time and effort in contributing to this study. Your participation is deeply valued and will provide significant insights for this research.

Informed Consent
I have read the instructions for the research and voluntarily agree to participate in the same. I understand that I can withdraw from it at any time without any consequences.
I give my consent to participate in the research.