



STRESS AND COPING MECHANISMS AMONG DIFFERENT PROFESSIONS: A SYNTHESIS OF LITERATURE ON ACADEMIC, PSYCHO-SOCIAL, AND ENVIRONMENTAL STRESSORS

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ABSTRACT

The transition through educational levels, particularly the shift from high school to higher education (Madebo et al., 2016), subjects students to escalating academic, social, and personal demands, frequently resulting in significant levels of stress. This paper presents a synthesis of 35 research studies conducted primarily between 2006 and 2016, aiming to categorize and analyze the documented prevalence, primary sources, and associated factors of stress among diverse student populations, including high school, secondary, undergraduate, medical, dental, and nursing students.

The systematic literature review reveals that academic stressors consistently emerge as the most common contributing factor across all cohorts, specifically citing vast syllabi, fear of failure (Sultana, 2015), high workload (Joseph & Ongori, 2009), meeting assignment deadlines, and frequency of examinations (Mehta, 2014). Students in private high schools and those whose fathers worked in defense services were found to have higher perceived stress scores in some studies (Ghosh, 2016; Das & Chaco, 2016). Furthermore, the period of highest stress intensity often correlates with specific stages of study, notably the transition into first year (Madebo et al., 2016) and the third or final undergraduate year for professional courses like nursing (Bilala & Bilali, 2013; Abdullah et al., 2015; Marcela et al., 2012).

Psycho-social and environmental factors significantly exacerbate academic pressure, including high parental expectations (Mehta, 2014; Sarita & Sonia, 2015), financial problems (Pariat et al., 2014), insufficient social support (Madebo et al., 2016), and the fear of unemployment post-graduation (Marcela et al., 2012). The symptoms reported are critical and diverse, encompassing poor concentration, headaches, sleep problems (Ranade, 2015; Kalagi Shah et al., 2015), and, alarmingly, indications of severe psychological morbidity such as depression, pessimism (Nagaraja et al., 2015), and self-harm ideation. While effective coping strategies included listening to music and talking to family (Pariat et al., 2014; Mazo, 2015), unhealthy coping mechanisms, such as substance use among male students (Michael et al., 2006; Jayakumar, 2014), highlight the urgent need for comprehensive, integrated interventions. Recommendations across the literature consistently call for the implementation of supportive learning environments, stress management workshops, mentor-mentee programs, and broad psychiatric screening.

Keywords: Stress, academic stress, student well-being, coping mechanisms, nursing students, psychological morbidity, professional development, higher education.



1. INTRODUCTION

The Contemporary Challenge of Student Stress

The student journey, while a period of intellectual growth and professional formation, is concurrently marked by intense pressure. The provided literature base, encompassing 35 studies conducted primarily in the mid-2010s, collectively underscores the high prevalence and diverse etiology of stress across various educational levels and disciplines. Stress, often described as an unavoidable component of student life (Kalagi Shah et al., 2015), manifests as both physical and mental health challenges, potentially leading to negative effects on academic performance and hindering professional development (Madebo et al., 2016).

1. This paper aims to synthesize the collective findings of these studies to provide a structured overview of:
2. The documented prevalence and intensity of stress among students.
3. The convergence and divergence of primary stress-causing factors (stressors).
4. The observed symptoms, psychological correlates, and effects of stress.
5. The common coping mechanisms utilized by students.
6. The consistent recommendations made by researchers for institutional and policy intervention.

2. REVIEW OF LITERATURE

The synthesized literature review is structured into four thematic sections covering the key dimensions of student stress identified in the source material.

2.1. Prevalence and Intensity of Stress

The research consistently indicates a significant level of perceived stress among students across all demographics. Madebo et al. (2016), in a study using quantitative and qualitative methods, reported a perceived stress level of 31.09 (exceeding a standard deviation of 8.91), signaling a high stress burden in their sample. Nagaraja et al. (2015) highlighted the alarming severity of stress within nursing students, noting a high prevalence of depression and instances where 18 girls considered self-harm, emphasizing the urgent need for psychiatric attention.

The literature also points to specific academic stages as periods of heightened stress:

- Transition Period: The initial shift from high school to higher education is identified as a period shouldering more demands and expectations (Madebo et al., 2016).
- Third and Final Year: Several studies on professional students (nursing, medicine) found that stress levels often peak in the third or final undergraduate year. Abdullah et al. (2015) reported the highest stress level among third-year nursing students, a finding echoed by Bilala and Bilali (2013) for 50% of third-year nursing students, and Marcela et al. (2012), who noted the severity of stress in the final undergraduate year. Wilson et al. (2015) observed that stressors and their intensity increased during the fourth year of dental study.

2.2. Primary Stressors: Academic, Psycho-Social, and Environmental

The studies converge on a tripartite categorization of stressors: Academic, Psycho-Social, and Environmental.

2.2.1. Academic Stressors (The Dominant Factor)

Academic factors are the most commonly identified source of stress across the literature (Joseph & Ongori, 2009; Ross et al., 2008). Key academic stressors include:

- Workload and Assignments: Academic workload, meeting deadlines, course assignments (Sultana, 2015; Joseph & Ongori, 2009; Abdullah et al., 2015), and insufficient time to study (Sultana, 2015) were cited as major or moderate stressors.
- Vast Syllabus and Examinations: Vaster syllabi, the long duration of courses, and the frequency of formative



and summative examinations were key factors for first-year medical students (Mehta, 2014).

- **Performance Anxiety:** The fear of failure was identified as a major source of stress for MBA students (Sultana, 2015) and was also a frequent stress-causing factor for first MBBS students alongside overall academic performance (Ranade, 2015).
- **Clinical/Professional Deficits:** For nursing students, stressors included a lack of professional knowledge and skills (Abdullah et al., 2015), and stress associated with school teaching staff in the first year (Bilala & Bilali, 2013). School requirements/projects were the most common cause of stress for political science students (Mazo, 2015).

2.2.2. Psycho-Social and Family Stressors

External social and family dynamics significantly contribute to stress levels:

- **High Expectations:** High expectations from parents (Mehta, 2014) and family (Sarita & Sonia, 2015; Pariat et al., 2014) were repeatedly cited as major sources of pressure, turning into stress when demands are not met.
- **Financial Problems:** Financial pressures (Ranade, 2015), inadequate financial support for studies, trouble managing a budget, and costs like mobile and internet bills were significant financial stressors (Pariat et al., 2014; Persaud & Persaud, 2016; Sultana, 2015).
- **Relationships:** Relationship with classmates (Madebo et al., 2016) and adjusting/maintaining romantic relationships (Pariat et al., 2014) were noted. Family stress was also found to have a negative impression on academic performance (Mustaq et al., 2012).
- **Post-Graduation Fear:** A critical stressor for final-year undergraduates was the fear of unemployment after completion of graduation (Marcela et al., 2012; Joseph & Ongori, 2009).

2.2.3. Demographic and Contextual Factors

While some studies found no significant difference in stress across certain demographics (e.g., Manasa Godati et al., 2015; Sultana, 2015), others noted critical differences:

- **Gender:** Several studies found that female students experienced higher stress than male students (Ghosh, 2016; Persaud & Persaud, 2016). Conversely, Prabhu (2015) found male higher secondary students had higher academic stress, and Michael et al. (2006) observed increased stress levels among male college students who used substances but refused medical help.
- **School Type/Location:** Ghosh (2016) found that private high school students had higher stress than government school students, a finding echoed by Prabhu (2015) for higher secondary students. Prabhu (2015) also noted urban students had higher stress than rural students. However, Persaud and Persaud (2016) found no significant difference in academic stress between students in government or private schools, or between rural and urban areas.
- **Family Occupation:** Students whose fathers worked in the defense service exhibited a significantly higher mean stress score (Das & Chaco, 2016), indicating high perceived stress related to this specific family background.

2.3. Manifestations, Symptoms, and Effects of Stress

The reviewed literature highlights a wide range of physical and psychological manifestations of stress, some of which require immediate clinical attention.

2.3.1. Physical and Cognitive Symptoms

Common physical and cognitive symptoms reported include:

- **Headache and Sleep Issues:** Headache, lack of sleep, poor concentration, insomnia, and the inability to stop thinking about concerns at night were frequently reported (Ranade, 2015; Kalagi Shah et al., 2015; Damayanthi, 2014).
- **Energy and Mood:** Low energy, fatigue, restlessness, sudden changes in mood, and high blood pressure were also documented (Ranade, 2015; Kalagi Shah et al., 2015).
- **Habit Changes:** Stressors frequently included changes in sleeping habits and eating habits (Ross et al., 2008).



2.3.2. Psychological Morbidity

A major concern raised by the research is the link between high stress and severe psychological problems:

- Depression and Pessimism: Studies identified a high prevalence of depression among nursing students, with symptoms ranging from mild to moderate degrees of sadness and pessimism (Nagaraja et al., 2015).
- Self-Harm Ideation: The finding that 18 girls had decided to harm themselves (Nagaraja et al., 2015) underscores the critical nature of unmanaged stress.
- Constant Stress: Research on medical students indicated constant stress and disturbed emotional stability over an 8-week period, necessitating screening (Mehta, 2014).
- Social Anxiety: Raghuram et al. (2014) studied the occurrence of social anxiety among nursing students, finding significant associations with gender and year of study.

2.4. Coping Mechanisms and Interventions

Students employ a range of coping mechanisms, categorized as positive/healthy and negative/unhealthy strategies.

2.4.1. Positive Coping Strategies

Common healthy strategies included:

- Leisure and Hobbies: Listening to music (Mazo, 2015; Pariat et al., 2014), watching television, sleeping, and pursuing hobbies (Pariat et al., 2014) were popular coping strategies.
- Social Support: Talking to parents and family members (Pariat et al., 2014) and occupying themselves with other leisure activities (Abdullah et al., 2015).
- Spiritual Practice: The study by Ajmal Majeed (2016) specifically concluded that Salat (Islamic prayer) acts as an effective treatment for stress, maintaining healthy human psychology and physiology.

2.4.2. Negative Coping Strategies

Alarmingly, several studies reported the use of unhealthy mechanisms:

- Substance Use: Negative coping techniques included spending more time on social networking, smoking, consuming alcohol, and drugs (Pariat et al., 2014). Male college students were specifically noted for utilizing alcohol and substances to reduce depression symptoms while refusing medical help (Michael et al., 2006).
- Avoidance: Unhealthy coping practices included negative strategies to avoid failure, aiming too low, and over-scheduling daily life (Jayakumar, 2014). Noora Abdul Kedar (2014) warned of the great danger of developing ineffective, habitual, or addictive negative coping strategies.

2.4.3. Recommendations for Intervention

The collective research strongly recommended systemic interventions focused on environment and capacity building:

- Supportive Environment: Nursing teachers should ensure a caring and supportive learning environment (Das & Chaco, 2016). Universities have a responsibility to maintain a well-balanced academic environment and address probable sources of stress effectively (Abdullah et al., 2015; Damayanthi, 2014).
- Workshops and Counselling: Regular stress management workshops (Dapaah, 2014; Abdullah et al., 2015), seminars, and counseling services should be made available (Narasappa Kumarswamy, 2013).
- Screening and Mentorship: Broad screening and psychiatric counseling (Nagaraja et al., 2015) and implementation of mentor-mentee programs and informal mentorship (Narasappa Kumarswamy, 2013; Mehta, 2014) were strongly advised.
- Faculty/Parental Role: Interventions at the faculty level were suggested (Wilson et al., 2015), and parents were urged to understand their role in reducing academic pressure (Sarita & Sonia, 2015).

3. DISCUSSION: SYNTHESIS AND IMPLICATIONS

The synthesis of this body of literature confirms that student stress is multifactorial, prevalent, and often severe. The studies, though diverse in location and sample, reveal consistent patterns in the stress experience.

3.1. The Converging Academic Burden





The overwhelming consensus is that the academic structure itself is the primary source of stress. High workload, vast syllabus, and frequent high-stakes assessments create a continuous state of pressure (Mehta, 2014; Sultana, 2015). This pressure is particularly intense at critical junctures—the initial acclimatization to higher education and the final years where career uncertainty (fear of unemployment) intersects with the final push for academic performance (Marcela et al., 2012). This cyclical pressure highlights the need for curricular reform and pedagogical debate as recommended by Joseph and Ongori (2009).

3.2. The Critical Role of Psycho-Social Context

The research clearly shows that stress is rarely purely academic. External pressures, particularly from high family expectations and financial constraints, act as amplifiers (Sarita & Sonia, 2015; Pariat et al., 2014). The high stress observed among students whose fathers worked in defense service (Das & Chaco, 2016) is a poignant example of how specific, high-demand family environments can predispose students to higher stress levels. Effective intervention must therefore be holistic, addressing parental roles and financial literacy, not just study skills.

3.3. Gender, Coping, and Risk

The findings regarding gender are divergent but informative. While some studies point to higher stress among females (Ghosh, 2016), others indicate higher academic stress in males (Prabhu, 2015) or increased risk-taking behavior (Michael et al., 2006). This divergence suggests that while female students may be more likely to report stress and related psychological symptoms, male students may be more likely to internalize stress and utilize maladaptive, substance-related coping mechanisms while refusing help. This distinction is critical for designing gender-sensitive stress management and counseling programs. The finding that students often resort to unhealthy strategies like excessive social networking, smoking, and alcohol (Pariat et al., 2014; Jayakumar, 2014) underscores the urgency of promoting healthier alternatives, such as the efficacy of spiritual practices like Salat (Ajmal Majeed, 2016) or stress inoculation techniques (Busari, 2014).

3.4. Implications for Institutional Policy

The consistent recommendations across the studies demand a unified institutional response:

1. **Mandatory Screening:** Given the documented prevalence of depression and self-harm ideation (Nagaraja et al., 2015), regular, mandatory mental health screening and the establishment of robust, confidential counseling services are non-negotiable.
2. **Mentor-Mentee Programs:** The proposal for mentor-mentee programs (Narasappa Kumarswamy, 2013; Mehta, 2014) provides a structured mechanism for providing social support and guidance, addressing the reported lack of emotional and social support.
3. **Faculty Development:** Faculty members, particularly in professional disciplines, must be trained not just in their subjects but in fostering a supportive, non-threatening learning environment (Das & Chaco, 2016) and in recognizing the early signs of severe student distress.

4. CONCLUSION

The reviewed literature provides compelling, consistent evidence that high levels of stress constitute a significant public health and educational challenge for students globally. Academic workload, performance anxiety, high family expectations, and financial insecurity are the dominant drivers. Crucially, unmanaged stress is linked to serious psychological morbidity, including depression and suicidal ideation. The path forward, clearly articulated by the researchers themselves, lies in adopting a holistic institutional strategy that integrates: curricular restructuring to manage workload; mandatory mental health screening and counseling; and the proactive cultivation of supportive, professionally mentored learning environments. Addressing student stress is not merely an academic luxury but an essential investment in student well-being, academic success, and future professional productivity.



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