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CULTURAL DETERMINANTS OF ADOLESCENT MENTAL HEALTH: A CROSS-SOCIETAL STUDY OF PSYCHOSOCIAL STRESS AND WELL-BEING

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ABSTRACT

High incidences of psychosocial stress in schools and institutions of higher learning have elevated the issue of mental health among adolescents and young adults as a major area of concern when it comes to the health of the population. The present study analyses the relationship between psychosocial stress and lifestyle behavior and depression among students and young adults. The analyses were conducted with a large secondary data consisting of approximately 27,901 observations and a variety of variables which are relevant to the demographic variables, psychosocial stressors, lifestyle habits and mental health indicators. Academic pressure, work pressure, financial stress, sleep, diet, study satisfaction, and family history of mental illness are the most notable variables that can be noted in the study. A quantitative design was a cross-sectional one used to determine the correlation of these factors with depression. The significant predictors of depression among the participants were identified using descriptive statistics, correlation analysis, and logistic regression modelling. The findings reveal that academic pressure and financial stress are psychosocial stressors with strong connections to increased levels of depressive symptoms. Sleep and study satisfaction were also associated with lifestyle as a protective factor against depression. The results indicate the interplay of stress, lifestyle habits, and psychological well-being in students. These findings show that encouraging positive academic settings, mental health literacy, and stress coping mechanisms to enhance the well-being of students and to decrease depression occurrence in academic groups are important.

KEYWORDS: Adolescent Mental Health, Psychosocial Stress, Depression, Academic Pressure, Lifestyle Factors, Student Well-Being, Financial Stress, Higher Education

1. INTRODUCTION

Adolescent and young adult mental health issues have become a significant universal public health problem. The period is marked by the quick psychological, social, and academic changes that may have a strong impact on the emotional state. The influence of enhancing adolescent mental health has been a popular topic, as it is crucial to focus on behavioral, social, and environmental risk factors that lead to psychological distress (Das et al., 2016). The social relationships are crucial in the formation of emotional health in adolescence. Family, peer, and school support may offer protective mechanisms that assist people to deal with stress and adversity. There are reasons to believe that teenagers who feel a solid social support system are less vulnerable to depressive symptoms and psychological distress. The connection between social support and mental health has been reported on a regular basis and has proven that supportive interpersonal contexts play a major role in resilience and emotional stability in the youth (Rueger et al., 2016).

Students are one such vulnerable group who are prone to psychological stress because of the academic, social and professional pressures that come with higher education. Research on university samples has demonstrated the high prevalence of mental health problems, such as depression, anxiety, and emotional exhaustion. In a systematic review of the mental health problem in the students of Asia, it was identified that academic pressures, study hours, and high competition are key contributors to mental distress in this group (Cuttilan et al., 2016). These results highlight the importance of the research to comprehend the factors of student mental health in academic settings. Psychosocial stress is considered the psychological pressure when the persons feel that the environment exerts demand that is above their resources to cope. Teenagers and young adults are often faced with academic pressures, social pressures, and personal growth pressures. The interdisciplinary model of adolescent well-being emphasizes that stress may affect emotional functioning, behavioral patterns, and the quality of life (Sigfusdottir et al., 2017).

Academic stress is considered one of the most noticeable stressors among the students. Studies have shown that the stress of academic performance, tests and expectations can adversely affect the quality of life and mental health of students. A systematic review of stress in university students identified academic workload and educational demands as some of the most commonly reported causes of stress among the student bodies (Ribeiro et al., 2018). Likewise, the ways younger generations perceive an academic stressor have been reported to mediate the emotional stability and mental health outcomes, meaning that educational settings have a paramount role in determining the mental health outcomes (Ramachandiran and Dhanapal, 2018). Behavioral lifestyles are also influential determinants of psychological well being among the students. The relationship between sleep patterns (especially) and mental health outcomes has been deemed to be very strong. Research on the sleep behavior of university students has found that sleep issues are extremely frequent and intertwined with depression and anxiety symptoms (Becker et al., 2018). Sleep disturbances can be also complicated in academically stressful moments like exams, when stress levels are likely to get higher and distort sleep habits (Campbell et al., 2018).

Academic settings, in the modern context, have presented new stressors that supersede academic stresses. Present day students are subject to the pressure of financial issues, job commitments, and career insecurity. Studies exploring modern college settings have indicated that academic pressure, economic pressure, and social pressure are major causes of psychological distress among students (Acharya et al., 2018). Financial issues, especially, may impact sleep patterns, working hours, and general psychological state among college students (Peltz et al., 2021). Emotions may be drained due to depression, low motivation and tiredness caused by psychological stress. Sleep disturbances and low mental resilience have been linked to emotional exhaustion among students at university. Studies that have investigated these associations suggest that patients with increased emotional exhaustion tend to develop depression and anxiety symptoms (Li et al., 2020).

Depression is among the most prevalent mental illnesses amongst college students. Major studies have shown that depression, anxiety, and stress are very common in university students, and thus mental health should be specifically addressed in educational institutions (Ramón-Arbués et al., 2020). Moreover, a study on female college students has also found a number of depressive predictors, such as academic stress and social pressure, which can predispose them to mental health issues (Blanco et al., 2021). Student mental health may also be altered by external societal events. The COVID-19 pandemic, in particular, had a substantial impact on the psychological health of students globally, as it disrupted the academic schedule, adding more uncertainty to the future. Research on the

psychological effect of the pandemic has reported higher rates of anxiety, stress, and depressive symptoms in college students throughout this time (Cao et al., 2020).

The main aim of this research is to investigate the connection between psychosocial stressors, lifestyle, and depression in students and young adults. Particularly, the research examines the impact of academic pressure, work pressure, and financial stress on mental health outcomes, as well as the contribution of well-being parameters, including sleep duration, diet, and satisfaction with studying. Further, the study aims to assess how demographic and background variables such as age, gender, and family history of mental illness, affect vulnerability to depression. Through a combination of these variables, the study determine important determinants of depression and offer information on factors influencing psychological well-being among student groups.

2. METHODOLOGY

2.1 Study Design

In this study, quantitative cross-sectional research design was used to study the correlation between psychosocial stressors, lifestyle factors and depression among students and young adults. The cross-sectional design is suitable to determine the relationships between outcomes of mental health and possible determinants among a large group of people at one time. The design enable the investigation on how various types of psychosocial stress and well-being indicators are linked to depressive symptoms. The study seeks to explain the effects of social settings and experience on mental health among youthful groups of people by combining psychological and socio-cultural insights.

2.2 Data Source

The research employed a publicly available secondary data called Student Depression Dataset, which has about 27,901 observations and 18 variables representing demographic traits, psychosocial stressors, lifestyle habits, and mental distress measurements (Dhuddi, 2023). The data values on variables such as age, gender, city, academic pressure, work pressure, financial stress, sleeping hours, diet, satisfaction with studying, job satisfaction, family history of mental illness, suicidal ideation, and depression state. These variables provide a comprehensive analysis of the connections between stressful variables and mental health. The secondary data available in large scale permits a more rigorous empirical research and boosts the reliability of the findings based on the use of heterogeneous and exhaustive sample.

2.3 Study Population

Studying population is included in the set of students and young adults who are represented in the dataset, and they may be identified by such demographic features as age, gender, and academic level. This demographic group is also of interest when carrying out a study on mental health since people in educational and early professional practice are also prone to various types of psychosocial stress. Psychological distress may be experienced because of academic pressure, financial issues, and lifestyle modification at this stage of life transition.

2.4 Variables and Measures

The most important outcome variable used in the given study is depression, which is the manifestation of depressive symptoms in respondents. Further data on mental health is manifested in the variable of suicidal thoughts, which implies severe mental discomfort. The several indicators of psychosocial stress include academic pressure, work pressure, and financial stress, which are the independent variables. These variables represent various aspects of stressful situations among students and young adults. Such lifestyle and well-being aspects as sleep duration, diet, and satisfaction with the study give an idea about the daily behaviors and conditions that affect psychological well-being. Demographic variables were incorporated including age, gender and family history of mental illness to eliminate differences among individuals that might make them vulnerable to depression.

2.5 Data Preparation

Before statistical analysis, the data was prepared systematically to control accuracy and consistency. The records were checked in case of duplication, discrepancy, and missing records. In order to eliminate bias in the analysis, duplicate observations were eliminated. All the missing values were verified and addressed using the cleaning procedures to keep the data intact. The coded and standardized categorical variables were to be statistically analyzed and the continuous variables were verified to the possibilities of outliers and distributions. All these preprocessing procedures ensured that the data represented the constructs of the psychosocial stress and lifestyle behaviors and mental health outcomes in the right way and that the data could be used in other processes of analysis.

2.6 Statistical Analysis

The statistical analysis was conducted to analyze the relationships between psychosocial stressors, the well-being indicators and the state of depression among the study population. One, the description of the demographic variables of the participants and the analysis of the stress and lifestyle variables distribution were carried out with the help of the descriptive statistical methods. A picture of sample and significant variables was presented by the use of frequencies, percentages, means as well as standard deviations. Correlation analysis was then conducted to examine the relationship between psychosocial stress factors, lifestyle behaviors and outcomes of depression and whether there might be correlation between the variables. In order to delve deeper on the determinants of depression, it was estimated through the use of logistic regression analysis to determine the influence of the psychosocial stress variables on the risk of experiencing depression and the well-being indicators. Such kind of an analysis provides the opportunity to explore multiple predictors simultaneously and provides a clue on the magnitude and significance of the associations between the latter and the predictors.

3. RESULTS

3.1 Descriptive Characteristics of the Study Population

It had 27,901 participants, which is a big sample in investigating psychosocial stress interactions with the lifestyle factors and depression. The demographic analysis showed a fairly equal representation of gender with a margin of male respondents over the female respondents. The participants were mostly students or young adults who had academic programs, which would represent the target population that is under educational and professional pressure. The age structure showed that the majority of the respondents were in the range of the age category of young adults, which is the transition period between higher education and early career building. Table 1 lists the important features of the study population before the detailed description of the demographic distribution of the participants is presented. The table gives a summary of the composition of gender, distribution of age group, family history of mental illness, and prevalence of depression in the data set.

Table 1. Demographic Characteristics of Participants

Variable	Category	Frequency	Percentage
Gender	Male	15,980	57.3%
	Female	11,921	42.7%
Age Group	18–21 years	12,204	43.7%
	22–25 years	10,346	37.1%
	26–30 years	5,351	19.2%
Family History of Mental Illness	Yes	6,882	24.7%
	No	21,019	75.3%
Depression Status	Depressed	10,214	36.6%
	Not Depressed	17,687	63.4%

The findings also suggest that the primary concern of the research is that over one-third of the participants were experiencing depressive symptoms, which makes the study of psychosocial stress and well-being determinants in this community relevant. In order to further represent the demographic make up of the participants, Figure 1 depicts the age distribution among the study population.

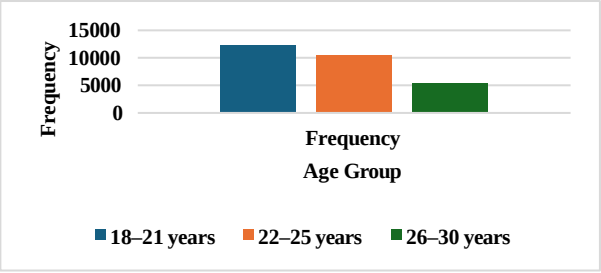

Figure 1. Age Distribution of the Study Population

Age distribution in Figure 1 confirms that most of the respondents are in their early adulthood, one of the development stages where individuals are making academic changes, career exploration and adapting to societal changes. These are some of the factors that can lead to heightened levels of psychosocial stress thus this age group is especially useful in studies involving mental health.

3.2 Distribution of Psychosocial Stress Indicators

The psychosocial stress variables indicated that the respondents were exposed to stress significantly. One of the most common stressors as reported by the respondents was academic pressure, which indicates the stressful nature of the educational setting. There was also work pressure and financial strain especially among those that were in a position of combining academic work with either employment

or financial load. The different participants were also found to have different work or study hours, which meant that there was variation in the intensity of workload among the population. Such differences create a valuable frame of reference to the study of the way in which chronic stress can affect psychological health and mental status. Table 2 below summarizes the level of academic pressure, work pressure and financial stress that respondents reported in order to give a better picture of the distribution of the stress related variables.

Table 2. Distribution of Psychosocial Stress Variables

Stress Indicator	Category	Frequency	Percentage
Academic Pressure	Low	6,420	23.0%
	Moderate	11,932	42.8%
	High	9,549	34.2%
Work Pressure	Low	8,114	29.1%
	Moderate	12,356	44.3%
	High	7,431	26.6%
Financial Stress	Low	9,805	35.1%
	Moderate	11,276	40.4%
	High	6,820	24.5%

Academic pressure seems to be the most significant stressor, then financial stress and work-related pressure, which means that academic and economic stressing factors can have a great influence on the mental health outcomes. To represent the trends of academic stress among the respondents, Figure 2 depicts the distribution of the level of academic pressure among the respondents.

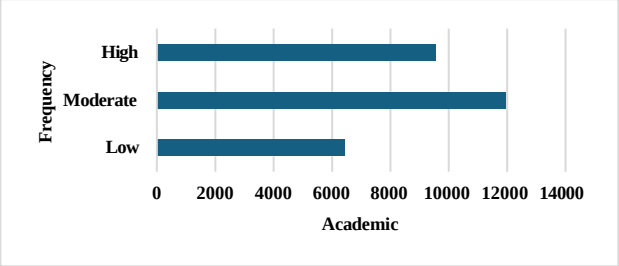

Figure 2. Levels of Academic Pressure Among Participants

The graphical expression used in Figure 2 supports the numerical data provided in Table 2 and indicates the prevalence of academic stress among students and the young adults. These levels of stress can be one of the causes of psychological stress and susceptibility to mental health problems.

3.3 Lifestyle and Well-Being Factors

The patterns of lifestyle showed significant differences among the participants regarding the duration of sleep, eating habits, and satisfaction with the activities of studies or work. Quite a substantial percentage of the respondents reported having sufficient sleep duration, but a substantial proportion of the respondents were suffering inadequate sleep. The unavailability of sleep has been commonly co-related with negative mental health, so this factor is the most topical in terms of comprehending risk factors of depression. Food habits were not homogenous among the participants as a significant number of participants reported irregular or unhealthy eating habits. The work and study satisfaction were also not evenly distributed and this implied that academic engagement and career satisfaction are possible determinants of psychological well-being. The spread of the most important lifestyle and well-being indicators within the participants is offered in Table 3.

Table 3. Lifestyle and Well-Being Indicators

Variable	Category	Frequency	Percentage
Sleep Duration	<5 hours	4,982	17.9%
	5–7 hours	14,613	52.4%
	>7 hours	8,306	29.7%
Dietary Habits	Healthy	11,742	42.1%
	Moderate	9,685	34.7%
	Unhealthy	6,474	23.2%
Study Satisfaction	Low	7,506	26.9%
	Moderate	12,384	44.4%
	High	8,011	28.7%

Further, the breakdown of dietary practices and satisfaction with the study indicates different degrees of well-being among the respondents, and it can affect psychological wellness.To further show the pictures of sleep among the participants, Figure 3 shows the distribution of sleep length categories.

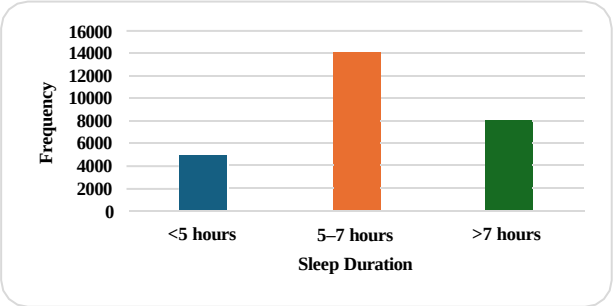

Figure 3. Distribution of Sleep Duration Among Participants

The aesthetic arrangement in Figure 3 informs about the dominance of the moderate sleep duration among the population, as well as it shows the sleep deprivation among a substantial portion of the participants. These sleeping patterns could be very important in determining the psychological health and emotional stability.

3.4 Correlation Between Psychosocial Stress and Depression

Correlation analysis showed that there were significant relations between psychosocial stress variables and depression. Academic pressure, work stress, and financial stress showed positive relationships with depression, establishing that increased stress levels are associated with increased levels of possible depressive symptoms. On the contrary, the positive factors of wellbeing were negatively correlated with depression which is a positive indicator of the protective nature of the lifestyle variables, including sufficient sleep duration and increased study satisfaction. Table 4 is the correlation matrix based on the relationships between the key psychosocial indicators of stress and well-being variables and depression.

Table 4. Correlation Matrix for Key Variables

Variable	Academic Pressure	Financial Stress	Sleep Duration	Study Satisfaction	Depression
Academic Pressure	1.00	0.41	-0.22	-0.30	0.46
Financial Stress	0.41	1.00	-0.19	-0.27	0.39
Sleep Duration	-0.22	-0.19	1.00	0.25	-0.33
Study Satisfaction	-0.30	-0.27	0.25	1.00	-0.42
Depression	0.46	0.39	-0.33	-0.42	1.00

The implications of these findings include; stress levels could be associated with an elevated risk of depression and positive lifestyle factors could lead to psychological strength. In an attempt to further justify the connection that exists between academic pressure and depression, Figure 4 has shown the prevalence of depression at various levels of academic stress in a visual manner.

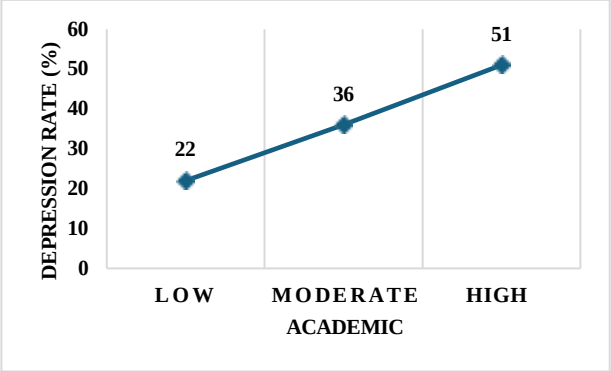

Figure 4. Relationship Between Academic Pressure and Depression

Figure 4 provides the trend, which gives the visual evidence of the statistical relationships, found in the correlation analysis. The fact that depression prevalence rises with an increasing amount of academic pressure highlights the possibility of the academic stress affecting mental health outcomes.

3.5 Logistic Regression Analysis of Depression Determinants

A logistic regression model was estimated to determine major predictors of depression that included the psychosocial variables of stress, factors related to lifestyles and the demographic variables. The findings suggest that academic pressure and financial stress were some of the best predictors of depression. Those with high academic pressure had a high probability of reporting depressive symptoms than those who reported less stress. The duration of sleep and satisfaction with the study were identified to be protective against depression. Those who reported having sufficient sleep and greater contentment with their educational endeavors were not at risk of developing the symptoms of depression.

4. DISCUSSION

The findings of the present research confirm the application of the psychosocial stress and lifestyle variables as significant in the development of depression among students and young adults. The results indicate that the depressive symptoms are correlated strongly to academic pressure, economic strain, and lifestyle such as sleep time, and satisfaction in studies. Such findings are in line with a greater amount of literature in the world that depression is highly prevalent among populations in a university. According to the meta-analysis study among Chinese university students, they were highly exposed to signs of depression, and the authors reported that academic environments might be exposing students to mental illnesses (Gao et al., 2020). The present research found out that psychosocial stressors were strong predictors of depression particularly academic and financial stress. These results confirm the accumulating literature suggesting that academic expectations and socioeconomic issues have a strong impact on the psychological welfare of students. Survey-based studies of the experiences of students during the COVID-19 pandemic found that academic disruption and future employment uncertainty heightened

psychological distress in university students (Aucejo et al., 2020).

The recent world events have aggravated the problem of mental health in students and adolescents. Research conducted on psychological effects during the COVID-19 pandemic revealed that abrupt shifts in learning conditions, isolation, and uncertainty about academic achievements had a considerable effect on the mental health of students. A study on the pandemic found that the levels of anxiety and depression among college students increased, with the consequences of significant disruptions in society making pre-existing psychosocial factors progress (Fu et al., 2021). The interactions between stress and mental health in this study align with overall results on adolescent psychological well being. A systematic review on the effect of the COVID-19 pandemic on adolescent mental health stated that the emotional distress, anxiety, and depressive symptoms among the youth groups across the globe significantly increased (Jones et al., 2021). Young adults and adolescents are especially vulnerable to environmental stressors since they are experiencing key developmental changes in the domains of education, identity formation, and social relations.

Uncertainty and disruption have been found to be incredibly impactful on the mental health of youths. A study examining the psychological experiences of adolescents in the COVID-19 pandemic identified that modifications in daily routines, social connections, and academic organization were among the factors that added emotional distress (Creswell et al., 2021). The incidence of anxiety and depressive symptoms in university students has been well reported in a range of literature and geographic locations. A meta-analysis of mental health in college students throughout the pandemic revealed a high prevalence of anxiety and depression, implying that mental issues related to stress are widespread in educational groups (Chang et al., 2021). The present findings of the study, indicating considerable psychosocial stress relationships with depression, are aligned with these findings.

Longitudinal studies have given more understanding on the long-term impact of stress on adolescent mental health. Researchers tracking adolescents through various phases of the pandemic established that more socially and environmentally stressed persons had bigger depressive symptoms increases (Cohen et al., 2021). The modification of educational delivery forms has also affected the mental health of students. As the pandemic shifted most to remote learning, it posed new academic challenges and changed the traditional learning settings. A meta-analysis study of the mental condition of remote-students found that the anxiety, depression, and stress levels were high at the times when students were receiving online education (Xu and Wang, 2023).

Anxiety and psychological distress are more characteristic of university groups, which has been noted in various recent reviews. A systematic review of the mental health of college and university students revealed that levels of anxiety were high and consistent across various geographical settings and systems of education (Tan et al., 2023). Knowledge of the determinants of depression in the young populations is crucial in informing mental health policy and education support frameworks. Depressive disorders have been established as a major burden among adolescents and young adults in various parts of the world, with a strong focus on the research that establishes risk factors predisposing to mental illness, i.e. things that can be altered (Luo et al., 2024). The current research paper helps add to this expanding body of research by showing the impact of psychosocial stress and lifestyle habits on depression among student groups.

5. CONCLUSION

The current study explored the association between psychosocial stress, lifestyle behaviors, and depression among students and young adults based on a large secondary dataset. The findings indicate that such factors as psychosocial stressors as academic pressure, economic hardship, and work-related pressures are significant contributors to mental health among groups of students. These stressors were found to have a close association with the rise in the instances of the depressive symptoms and this is suggestive of the psychological struggle, which individuals undergo during an academic and an early career arrangement. The factors of lifestyle and well-being were also identified to have an influence on mental health factors. Less depression was found to be associated with such variables as the time of sleep and satisfaction with study, which can hint at the idea that healthy lifestyle behavior and positive experiences at school can result in the improvement of the psychological state. On the other hand, sleep deprivation and dissatisfaction with the academic activities were linked to the fact that they contributed to the increased vulnerability of the mental health problems. The results indicate the necessity to address the problem of psychosocial stress in learning establishments and provide a good environment to promote well-being among learners.

Among the measures that can be put in place in institutions to allow students to overcome academic and financial strain, mental health awareness programs, stress management programs and supportive counseling services should be taken into consideration.

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