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A study on academic stress among teen-age girls in Morigaon district, Assam

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***Abstract*---**Academic learning is the most common source of stress among adolescents, and it is linked to mental health issues; understanding its determinants aids in understanding the risk factors that influence stress. The study's main goal was to evaluate educational stress and its predictors in adolescent girls. A cross-sectional study was carried out in three colleges in Morigaon District, Assam, with teenage girls studying preuniversity and university studies. 314 adolescent girls between the ages of 16 and 19 were chosen at random for the study. The data was gathered using a random sample technique. Adolescents were given self-administered questionnaires that included a sociodemographic data sheet, a personality inventory, an IQ evaluation, and an educational stress scale.

***Keywords*---**academic stress, adolescent girls, educational stress, predictors of educational stress, Assam.

Introduction

Adolescence is the phase of human growth and development that occurs after childhood but before adulthood, and is defined as the age range of ten to nineteen years. It has a population of about 17 percent of the world's population. [1] India is home to the world's largest teenage population. [2] Adolescents go through a lot of behavioural and physiological changes at this time, making them more vulnerable to numerous stresses. [3] Academic-related events are thought to be important stressors for them, particularly in Asian countries [4], because their academic achievement at this stage is critical for higher education and job opportunities. [5] According to various research conducted after the year 2000, the prevalence of stress among Indian adolescents ranged from 13 percent to 45 percent. [6] According to research conducted in in Morigaon District, Assam, 93 percent–100 percent of school pupils were experiencing medium to moderate stress, with only 1.9 percent experiencing severe stress. [7] According to Deb et al., 2015, nearly two-thirds (63.5%) of Assames students experienced stress as a

result of academic pressure. [8] It is thus worthwhile to conduct additional research in order to protect the rapidly rising adolescent population.

India's education system has grown extremely competitive as a result of the country's rapidly growing population. As a result, beginning at the pre-primary level, the students are subjected to competitive pressure in the form of yearend examinations that determine their advancement to the next higher grade. Academic stress is amplified at the preuniversity level, as entrance to good colleges is contingent on their qualifying examination results or marks. In the Indian educational system, getting excellent grades is more essential than learning. As a result, pupils are overburdened with academic work, producing a great deal of academic stress among Indian teenagers. [9] Academic stress has a negative impact on students' mental, emotional, and physical well-being, as well as their ability to study and succeed. [12,13] Several studies have found a link between educational stress and internalising and externalising difficulties in the classroom. [14,15] High-stress adolescents were shown to engage in a variety of maladaptive and dangerous behaviours, including increased alcohol and drug intake, unprotected sexual activities, physical inactivity, poor eating and sleeping patterns. [16,17] Stressed teenagers were also shown to have higher rates of depression. [18] A study conducted in Morigaon District, Assam found a link between educational stress and teenage mental health problems. [19] While both boys and girls are concerned about academics and finances, girls are more sensitive to heightened stress when it comes to problems such as future events, classmates, and personal health. [20] Adolescent girls are observed to be more stressed by unpleasant interpersonal experiences than boys. [21] Research has shown that adolescent girls are more stressed than guys. [22] However, few studies on adolescent girls have been conducted. The goal of this study is to look into this previously unknown territory.

Stress is thought to be influenced by elements in the family, student, and school environment. [23] Previous research on the relationship between psychiatric illness and sociodemographic factors has been limited. [24] There is a void in the academic literature when it comes to studies that look at the relationship between demographic and psychosocial characteristics and adolescent academic stress. There are contradictions in the literature about the association between stress and personality traits among adolescent girls, which the current study intends to fill. According to Malik (2015), there was no significant link between stress and personality traits in adolescent girls. [25] Personality variables have a considerable impact on stress levels, according to a 2015 study by Nechita et al. [26] According to Sachdeva's research, there is no link between physical stress, personality, or reasoning capacity in adolescent girls. [27] The purpose of this study was to look into the influence of personality characteristics in academic stress.

Finding the drivers of academic stress could provide data for better understanding the risk variables that affect academic stress. This knowledge could be utilised to help professionals such as teachers and psychologists conduct particular preventive interventions to lessen teenage academic stress.

Preventive strategies to promote mental health among adolescent girls can be created and implemented based on these findings. The current study was done against this backdrop with the goal of assessing academic stress among adolescent females and investigating the significant demographic, personality, and IQ aspects that could predict it.

Literature Review

The researcher had done some research on the topic of investigation by reading some relevant books. Study on Stress Management & Coping Strategies in Reference to IT Companies was undertaken by Devi (2011). 'Stress' has long been known to cause acute dysfunctions and a variety of ailments, as well as an increase in divorce rates as well as other harassments. "A Study of Teacher Strain: Exploring Practitioner Research & Teacher Collaboration as a Way Forward" was undertaken by Hussain (2010). Concerns about teacher stress are examined, including how it is measured and the effectiveness of qualitative methods over quantitative ones, as well as how disruptive students are included or excluded from classes, as well as how practitioner research can be used to promote teacher collaboration in order to alleviate teacher stress. "A Comparative Research on Stress among Graduates & Post Graduates Students" was conducted by Mazumdar, Gogoi, and Haloi (2012). In this research, we examine the differences in stress symptoms between men and women. Taiwanese college students' stress sources were researched by Wen. Stress among Taiwanese college students is the subject of this investigation. Male students were shown to be more stressed out by their families than female pupils. Research on stress was undertaken by Education International (EI), the European Trade Union Committee for Education (ETUCE), and the World Health Organization (WHO). It looked at the factors that contribute to teacher stress, the consequences of that stress, and possible solutions.

Data Collection

Between January and June of 2021, data was collected. After obtaining informed consent, self-administered questionnaires were distributed. The investigator provided an overview of the questionnaires as well as the method of capturing responses. The questions took each participant 40–45 minutes to complete. While the students were filling out the questionnaires, the investigators were ready to answer any questions they had.

Results

The distribution of sociodemographic, educational, and psychological factors in the study sample is depicted in Tables 1. The sample's average age was 18.01 percent 0.9, with 65 percent living in rural areas, 79.6% belonging to the Hindu religion, 69.4% belonging to a nuclear family (Figure 1), 36 percent having one sibling, 41.7 percent being the family's firstborn, 72.3 percent pursuing science combination, 78.3 percent studying in private institutions, 39.2 percent having moderate stress, 60.2 percent having average IQ level, and 51.3 percent exhibiting ambivert and neuroticism personality traits. The majority of adolescent fathers and moms (55.4 percent–53.2 percent) were not educated beyond high school.

More than half of the teenagers' fathers (58.3%) were farmers, while 40.4 percent of their moms were housewife (Figure 2). The average monthly income for a family was $12,337.58 6239.6, the average IQ percentile was 47.04 6.47, and educational stress was 50.04 10.82. Table 2 exhibit the results of the link between educational stress and demographic characteristics, educational variables, IQ level, and personality traits, respectively. It discovered a link between educational stress and religion, father education, number of siblings, subject combination, personality type, and IQ.

Educational stress was used as the dependent variable in a backward regression analysis. By creating appropriately dummy variables, age, religion, father education, mother education, income, number of siblings, combination of subjects in preuniversity course, and personality type were included as predictors. Number of siblings (beta = 0.115; P = 0.037) and extrovert and neuroticism personality type (beta = 0.242; P = 0.001) negatively predicted educational stress and were considered positive variables. These favourable factors operate as a buffer against educational stress. Introvert and neuroticism (beta = 0.160; P = 0.026), Hindu religion (beta = 0.119; P = 0.028), illiterate father (beta = 0.125; P = 0.017), and commerce subject combination (beta = 0.278; P 0.001) were found to be positive predictors of educational stress in adolescent girls.

Table 1
Description of demographic variables among adolescent girlsin Morigaon District, Assam(n=314)

Demographic Variables	Categories	Frequency (%)
Area of residence	Rural	204 (65.0)
	Urban	110 (35.0)
Type of religion	Hindu	250 (79.6)
	Muslim	64 (20.4)
Father education	Illiterate	85 (27.1)
	Up to 10th and PUC	174 (55.4)
	Graduate and above	55 (17.5)
Mother education	Illiterate	125 (39.8)
	Up to 10th and PUC	167 (53.2)
	Graduate and above	22 (7.0)
Father occupation	Unemployed	17 (5.4)
	Manual worker	59 (18.8)
	Self employed	55(17.5)
	Farmer	183 (58.3)
Mother occupation	Housewife	127 (40.4)
	Manual worker	60 (19.1)
	Self employed	28 (8.9)
	Farmer	99 (31.5)
Type of family	Joint	93 (29.6)
	Nuclear	218 (69.4)
	Extended	3 (1.0)
Number of siblings	1	113 (36.0)
	2	101 (32.2)
	>2	100 (31.8)
Birth order	First child	131 (41.7)
	Middle child	120 (38.2)
	Last child	63 (20.1)
Variables		Mean±SD
Age (years)		18.01±0.9
Family monthly income		12337.58±6239.6
SD=Standard deviation		

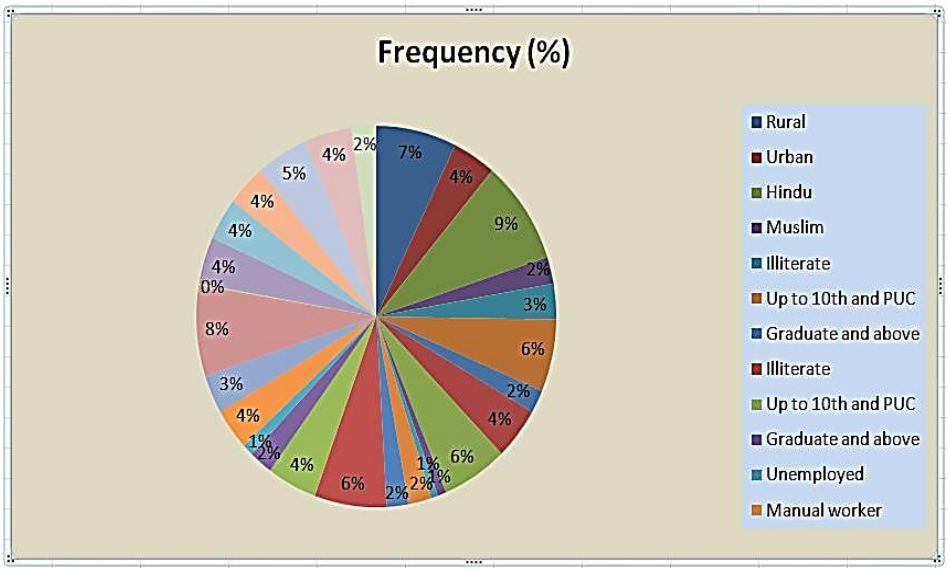

Figure 1. Description of demographic variables among adolescent girlsin Morigaon District, Assam

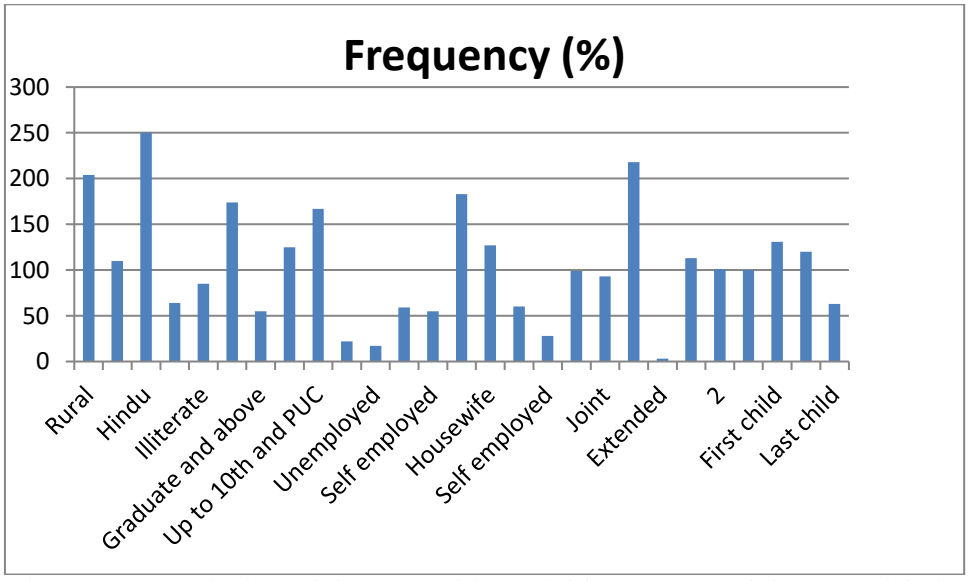

Figure 2. Description of demographic variables among adolescent girls in Morigaon District, Assam

Table 2
Description of educational variables among adolescent girls (n=314)

Demographic variables	Categories	Frequency (%)
Combination of subjects	Science combination	227 (72.3)
	Commerce combination	36 (11.5)
	Arts combination	51 (16.2)
Types of educational institution	Government	68 (21.7)
	Private	246 (78.3)
Number of homework hours (mean±SD) 2.53±1.2		

SD=Standard deviation

Discussion

The goal of this study was to discover determinants of educational stress among preuniversity and undergraduate students in an exploratory manner. The majority of the variables looked at had a statistically significant link with educational stress levels. In this study, teenage females with an illiterate father had higher stress levels than those with a literate father, and educational stress was positively predicted (beta = 0.125; P = 0.017). This finding was comparable to that of Finkelstein et al., 2007, who found that adolescents from homes with lower parent education are less hopeful than those from families with higher parent education. This pessimism may be a contributing factor in adolescent stress. [31]

The number of siblings was found to be a negative predictor of educational stress (beta = 0.115; P = 0.037) in this study. Previous research has found that teenagers who have more siblings had better levels of self-confidence than those who have fewer siblings. [32] In this study, adolescent girls with introvert neuroticism features predicted educational stress favourably (beta = 0.160; P = 0.026), while those with extrovert neuroticism predicted it negatively (beta = 0.242; P = 0.001). In the majority of prior studies, neuroticism was found to predict the occurrence of stressful life situations as well as academic achievement. [33-35] Neuroticism is associated with a proclivity for unpleasant or negative feelings, which may be a stress predictor. [36] Neuroticism has been found to be a predictor of academic achievement in many research. [35]. Among this study, the combination of Hindu religion and commerce subjects predicted educational stress in adolescent girls. There are no studies that support these characteristics; therefore, future study should take these variables into account. These findings will help mental health professionals create effective stress management programmes and workshops for adolescent girls. A few cross-sectional studies looked at relationships rather than causality.

Conclusions

Most of the undergraduate and graduate adolescent girls in this study were found to be under educational stress. The amount of scholastic stress students felt was determined by their personality type, father's education, the combination of

disciplines they chose during preuniversity, and the number of siblings they had. As a result, when diagnosing stress in adolescent females and developing appropriate stress prevention strategies, these aspects should be considered. These stressors should be recognised by teachers, parents, and other primary caregivers. Stress management programmes introduced at the school level will be more beneficial.

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