# Stress, Anxiety and Depression among Adolescents

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**ABSTRACT** The impact of mental health on the well-being of adolescents has become a significant concern. The mental health of an individual depends on the coping skills acquired in alleviating stress, anxiety and depression. As stress, anxiety and depression are interlinked in its aetiology, symptoms, consequences and its effect on behaviour, the study attempts to explore the level and identify its determinants. 1,038 adolescents from the age group of 12 to 15 years were chosen as the sample. A standardised tool named DASS 42 and a self-formulated questionnaire with seventy items were used to determine the level and the determinants of stress, anxiety and depression, respectively. Adolescents do exhibit a moderate level of stress, anxiety and depression. Academic pressure has been the most influential factor for stress and depression and obsessive-compulsive disorder for anxiety. The finding cautions the academicians, teachers, parents to explore the causative factors at an early stage and implement appropriate preventive measure.

## INTRODUCTION

The term 'adolescence' is a theoretical construct learnt through psychosomatic, psychosocial, chronological and cultural views. Steinberg in the year 2014 also termed that this period of lifespan is typically marked as the period between the onset of puberty and the formation of social autonomy. Harikrishnan and Sailo (2019) said that early adolescence is a span of remarkable biological changes in the human lifespan and adolescents need both mental and physical wellbeing for better growth.

About ten to twenty percent of the children and adolescents worldwide suffer from one or the other mental health problems (World Health Organisation (WHO) 2017). It is adjudged that fifty percent of the mental disorders are initiated by the age of 14 and this increases to seventy-five percent by the age of 18 years (Kessler et al. 2007). As per the Young Health Movement (2017), the prevalence of mental health disorders, like anxiety and depression, has increased by seventy percent in the past 25 years among the adolescent community. These disorders were found to have adverse consequences on their overall development, including lower educational performance, increased rate of school dropouts, impaired social interactions, augmented risk of substance abuse, and suicide (Copeland et al. 2014; Hetrick et al. 2016).

As it is known that the prevalence of mental health condition issues is present among school-going adolescents is a universal concern, with global studies informing the clinical levels of psychopathology, including stress, anxiety and depression in student populations worldwide where many studies have also talked about it. The prevalence of DAS increases as the parents' love decreases, and lack of parental affection takes toil on the mental peace of children (Sandal et al. 2017).

Stress, anxiety and depression were found to be associated with each other, and several studies also show it. Dusselier et al. (2005) had also mentioned that the coinciding symptoms and behaviours of these three psychological problems can lead to all sorts of educational issues, which in turn impact the academic achievement of students. It has also been proven that the academic performance from school education to the higher education level is influenced by the symptoms of stress, anxiety and depression, as these mental disturbances lead to difficulties in concentration, lack of motivation and interest, poor attendance, and poor physical health. A study done by Sandal et al. in 2017 also showed the importance of early identification of stress, anxiety and depression and its prevention among adolescents.

Thus, adolescence is the period where the prevalence of mental health pressure is more

common, and its consequences may have effects on behaviour. Thus, the key rationale of the current study is to explore the level of the major mental disturbances, like stress, anxiety and depression, and to understand its determinants among the schoolgoing adolescents as a strategy of early detection towards preventing and protecting the students against these mental disturbances.

## Objectives

### General Objectives

- To determine the states of stress, anxiety, and depression
- To analyse the determinants of stress, anxiety and depression

### Specific Objective

- To identify the correlation between stress, anxiety and depression

## METHODOLOGY

The study adopted a descriptive longitudinal research design. Certain inclusion and exclusion criteria were set to identify the schools of study. With the schools identified for the study, the criteria for the selection of the sample were also set. A total of 1,038 students enrolled in 8th and 9th grades within the age ambit of twelve to fifteen years were selected for the study. To identify the states of stress, anxiety and depression, a standardised tool developed by Lovibond and Lovibond in 1995 titled the DASS 42 (Depression Anxiety Stress Scale) was used. DASS comprises of three self-report scales formulated to examine the levels of depression, anxiety and stress among adolescents. Each of the three scales contains seven items. Anxiety, depression and stress are all negative feelings, divided into subscales of 2 to 5 items with similar content. Subjects are asked to use 4-point severity/frequency scales to rate the degree to which they have experienced each mental state over the past week. Scores for each of the mental states are calculated by summing the scores for the pertinent items. The scale has four levels of each of the mental states of stress, anx-

iety and depression that were categorised as Normal (0-7), Mild (8-9), Moderate (10-14), Severe (15-19), and Extremely severe (20+). Reliability of the three scales is considered adequate and test-retest reliability is likewise considered adequate with 0.71 for depression, 0.79 for anxiety and 0.81 for stress. A self-formulated rating scale with seventy items under each of the three mental disturbances, namely stress, anxiety and depression, was devised. These seventy items are to identify the determinants of the mental disturbances among schoolgoing adolescents. Face validation of the self-formulated questionnaire has been found. The content of the self-formulated tool was also validated with the help of five experts from different fields of study. The tool is a five-point rating scale with 1 as always, 2 as often, 3 as sometimes, 4 as rarely and 5 as never. The scores were categorised under three levels, namely, 1-17 (severe), 18-35 (moderate) and 36-50 (mild). The data were subjected to statistical analysis through SPSS 20.

## RESULTS AND DISCUSSION

### General Profile of the Identified Sample

The general profile of the respondent was depicted in Table 1. A total of 1,038 students within the age ambit of 12 years to 15 years were engaged for the study through random sampling. The highest percentages of them (44.4%) were 13 years old, followed by 14 years (38.5), 12 years (10.4) and 15 years (7%). Relatively, a high-

**Table 1: General profile of the identified sample**

| Variables and its description | Number | Percent |
|---|---|---|
| *Gender* | | |
| Male | 512 | 49.3 |
| Female | 526 | 50.7 |
| *Age of the Child* | | |
| 12 yrs | 108 | 10.4 |
| 13 yrs | 457 | 44.0 |
| 14 yrs | 400 | 38.5 |
| 15 yrs | 73 | 7.0 |
| *Class* | | |
| 8th Std | 504 | 48.6 |
| 9th Std | 534 | 51.4 |
| *Type of School* | | |
| Aided | 293 | 28.2 |
| Private (Co-ed) | 745 | 71.8 |

er percentage of the respondents were from the 9th grade standard (51.4%) followed by grade 8 (48.6%).

## Levels of Stress, Anxiety and Depression

Table 2 projects the level of stress, anxiety and depression of the selected group of respondents being categorised into five categories and the percentage analysis was given. Looking into the data, 23.8 percent of adolescents are said to have stress at a moderate level, followed by a mild level (21.2%). Stress is commonly reflected as the common disease of the contemporary age. It is a pattern of negative physiological symptoms and psychological behaviour that happens in an individual.

**Table 2**: **Levels of stress, anxiety and depression**

| DASS | Classification | Frequency | Percent |
|------|----------------|-----------|---------|
| Stress | Normal | 516 | 49.7 |
| | Mild | 220 | 21.2 |
| | Moderate | 247 | 23.8 |
| | Severe | 49 | 4.7 |
| | Extremely severe | 6 | 0.6 |
| Anxiety | Normal | 272 | 26.2 |
| | Mild | 140 | 13.5 |
| | Moderate | 312 | 30.1 |
| | Severe | 202 | 19.5 |
| | Extremely severe | 112 | 10.8 |
| Depression | Normal | 399 | 38.4 |
| | Mild | 252 | 24.3 |
| | Moderate | 297 | 28.6 |
| | Severe | 78 | 7.5 |
| | Extremely severe | 12 | 1.2 |

A significant finding that appeared from the study was that most of the selected group of adolescents had a certain amount of anxiety when it was classified under mild, moderate, severe and extremely severe. However, it was observed that nearly thirty percent of adolescents are on a moderate level (30%) followed by severe (19.5%), which was found to be very dangerous. A study had suggested that high levels of anxiety predict the development of panic attacks and anxiety symptoms. Studies had also observed that anxiety is a risk factor for adolescents (Anderson and Hope 2009).

Also drilling further into the depression level of the adolescents, more than 1/4th of them were at the moderate level (28.6%) followed by mild level (24.3%), which is also dangerous. A

study conducted by Kessler et al. (2003) found that depression has been the commonest reason why people go to a therapist, although the common perception is that all psychological problems are depression. Several studies have also indicated that the prevalence rates of the individual disorders of stress, anxiety and depression are growing at an alarming rate among adolescents.

## Determinants of Stress

The psychological and physiological well - being of adolescents is affected by the daily stressors that they encounter (Yahav and Cohen 2008). Table 3 captures the finding regarding the determinants of stress in an encapsulation.

**Table 3**: **Determinants of stress**

| Determinants of stress | Classification | Frequency | Percent |
|------------------------|----------------|-----------|---------|
| Academic Stress | Mild | 338 | 32.6 |
| | Moderate | 675 | 65.0 |
| | Severe | 25 | 2.4 |
| Social Stress | Mild | 365 | 35.2 |
| | Moderate | 658 | 63.4 |
| | Severe | 15 | 1.4 |
| Family Stress | Mild | 365 | 35.2 |
| | Moderate | 655 | 63.1 |
| | Severe | 18 | 1.7 |
| Attitudinal Stress | Mild | 345 | 33.2 |
| | Moderate | 671 | 64.6 |
| | Severe | 22 | 2.1 |
| Poor Time Management | Mild | 375 | 36.1 |
| | Moderate | 632 | 60.9 |
| | Severe | 31 | 3.0 |
| Physical Stress | Mild | 352 | 33.9 |
| | Moderate | 663 | 63.9 |
| | Severe | 23 | 2.2 |
| Drastic Change in Life/Traumatic Event/ Romantic Relationship | Mild | 362 | 34.9 |
| | Moderate | 658 | 63.4 |
| | Severe | 18 | 1.7 |
| Total Score | Mild | 312 | 30.1 |
| | Moderate | 714 | *68.8 |
| | Severe | 12 | 1.2 |

It was very clear from Table 3 that the determinants of stress were classified under seven determinants, namely, academic pressure, social stress, family stress, attitudinal stress, poor time management, physical stress, drastic change in life or a romantic relationship. In the present study, almost all the factors had a moderate ef-

fect on influencing stress among the identified sample, but the highest was observed by the adolescents' academic stress (65%). In the present day scenario, 8th and 9th grade students feel more pressure in specific subjects like mathematics, science and language, as those subjects help them secure good marks in their board exams and henceforth. Moreover, they were also forced to do comparatively better than their counterparts, which stresses them a lot and in turn, affects their mental well - being. In their study based on a sample of adolescents aged 12-13 years, Banerjee S (2011) found that academic stress is kind of stress that arises due to academic factors such as heavy school agenda, unrealistic belief and demands from their parents and teachers, poor study habits, low academic performance, etc. Stress is anything that inflicts an additional demand on an individual's capability to cope, often with academic stress. Mostly every student feels stressed in his or her education period (Sahu et al. 2016). Certain factors like a long school calendar, deprived socioeconomic status, educational background of the family, unreasonable belief and demands of teachers' and low academic performance intensify stress (Liu and Lu 2012).

It was seen that attitudinal stress stood second at 64.4 present, which shows that lack of confidence in them and perception of indifferent behaviour of people towards them creates mental conflict. A study by Malinowska-Cieslik et al. in 2019 also mentioned that adolescent communication in the family and with peers showed stronger impact of adolescents' optimism and was significantly related to their classroom involvement and to students' self-reported adjustment and attitude towards their school. Hence, these daily stressors are essential to be explored to understand the healthy as well as problematic development in adolescence.

## Determinants of Anxiety

Table 4 presents the distribution of the respondents with respect to the most influential determinants of anxiety within the identified categories of mild, moderate and severe.

It was apparent from Table 4 that determinants of anxiety were classified under seven factors, that is, separation anxiety, specific pho-

**Table 4**: **Determinants of anxiety**

| Determinants of stress | Classification | Frequency | Percent |
|---|---|---|---|
| Separation Anxiety | Mild | 356 | 34.3 |
| | Moderate | 655 | 63.1 |
| | Severe | 27 | 2.6 |
| Specific Phobias | Mild | 321 | 30.9 |
| | Moderate | 691 | 66.6 |
| | Severe | 26 | 2.5 |
| Social Anxiety | Mild | 371 | 35.7 |
| | Moderate | 642 | 61.8 |
| | Severe | 25 | 2.4 |
| Generalised Social Disorder | Mild | 334 | 32.2 |
| | Moderate | 678 | 65.3 |
| | Severe | 26 | 2.5 |
| Generalised Panic | Mild | 339 | 32.7 |
| | Moderate | 674 | 64.9 |
| | Severe | 25 | 2.4 |
| Academic Anxiety | Mild | 339 | 32.7 |
| | Moderate | 677 | 65.2 |
| | Severe | 22 | 2.1 |
| Obsessive and Compulsion Disorder | Mild | 315 | 30.3 |
| | Moderate | 695 | 67.0 |
| | Severe | 28 | 2.7 |
| Total Score | Mild | 300 | 28.9 |
| | Moderate | 720 | 69.4 |
| | Severe | 18 | 1.7 |

bias, social anxiety, generalised social disorder, generalised panic, academic anxiety and obsessive and compulsion issues. It was seen that almost all the factors had a moderate effect on influencing anxiety, but the highest was registered with the obsessive and compulsion disorder (67%). The adolescent develops OCD (Obsessive Compulsion Disorder) and is characterised by obsessions, which are invasive and upsetting judgment and descriptions. This, in turn, may cause anxiety, and compulsions, which were opinionated as otherwise behaviours.

Drilling further into the determinants of anxiety, it was seen that specific phobias (towards a tall building, dark place, doctor, etc.) had also been another influential factor. It is common to have particular phobias during the period of adolescence. This finding of the study was also supported by Merikangas, He and Burstein et al. (2010), who reported that specific phobia is often the first of any anxiety disorder to be present throughout development. Specific phobia is defined as an irrational fear, which has a substantial adverse effect on daily living (American Psychiatric Association (APA) 2000).

## Determinants of Depression

Depressive disorders among adolescents have become a major public health issue because of their high occurrence (Costello et al. 2006). Table 5 presents the distribution of the respondents within the identified categories of mild, moderate and severe levels of the determinants of depression.

**Table 5: Determinants of depression**

| Determinants of stress | Classification | Frequency | Percent |
|---|---|---|---|
| Academic Pressure | Mild | 330 | 31.8 |
| | Moderate | 679 | 65.4 |
| | Severe | 29 | 2.8 |
| Present/Future Life | Mild | 343 | 33.0 |
| | Moderate | 668 | 64.4 |
| | Severe | 27 | 2.6 |
| Physical and Psychological Concerns | Mild | 354 | 34.1 |
| | Moderate | 657 | 63.3 |
| | Severe | 27 | 2.6 |
| Attitudinal Issues | Mild | 369 | 35.5 |
| | Moderate | 646 | 62.2 |
| | Severe | 23 | 2.2 |
| Social Environment | Mild | 384 | 37.0 |
| | Moderate | 633 | 61.0 |
| | Severe | 21 | 2.0 |
| Family Matter | Mild | 354 | 34.1 |
| | Moderate | 658 | 63.4 |
| | Severe | 26 | 2.5 |
| Others | Mild | 379 | 36.5 |
| | Moderate | 628 | 60.5 |
| | Severe | 31 | 3.0 |
| Total Score | Mild | 315 | 30.3 |
| | Moderate | 704 | 67.8 |
| | Severe | 19 | 1.8 |

Table 5 lucidly explains the seven determinants of depression, namely academic pressure, present/future life, physical and psychological concerns, attitudinal issues, social environment, family matters and others. It was seen that academic pressure (65.5%) had been the most influential factor followed by present and future life (64.4%) as per the perception of 8th and 9th grade schoolgoing adolescents. As most of the adolescents are under tremendous pressure by their parents and the school's demands, it is no wonder that academic pressure stands tall in affecting their mental health. The interwoven signs and responses of these three psychological states can lead to all sorts of educational issues with an adverse impact on the academic performance of these adolescents. It has been found

that students' performance at all levels of education is subjective to their mental states (Dusselier et al. 2005). The negative mental states lead to difficulties in concentration, lack of motivation and interest, poor attendance, and impaired physical health.

## Relationship Between Stress, Anxiety and Depression

Table 6 depicts the correlation between stress, anxiety and depression. It was exciting to notice that the association between stress, anxiety and depression depends on each other, as the correlation was highly significant at the 0.01 level. The positive correlation between the three mental states, namely, stress, anxiety, and depression has been proven in various studies (Hammen et al. 2004). Moreover, it is also demonstrated that high levels of perceived stress do increase the risk for an individual in developing anxiety and depression symptoms and vice-versa.

**Table 6: Relationship between stress, anxiety and depression**

| Variable | Corr. coeff | Stress | Anxiety | Depression |
|---|---|---|---|---|
| Stress | Correlation | 1 | .517** | .490** |
| | Sig. | | .000 | .000 |
| Anxiety | Correlation | | 1 | .536** |
| | Sig. | | | .000 |
| Depression | Correlation | | | 1 |
| | Sig. | | | |

**. Significant correlation at 0.01 level.

## CONCLUSION

The key finding was that academic pressure was found to be the most influential factor for stress and depression and obsessive-compulsive disorder for anxiety. In sum, the moderate level of stress, anxiety and depression exhibited by the selected lot of school students cannot be ignored. It has to be addressed with caution by postulating a suitable intervention that can help them in acquiring coping skills towards encountering every determinant of stress, anxiety and depression.

## RECOMMENDATIONS

Adolescence is the period where the prevalence of mental health pressure is more com-

mon, and its consequences may have adverse effects on their performance as well as behaviour. Hence, this study would serve as a backup study for the psychologists to devise a suitable intervention to alleviate these mental disturbances at the right age and to customise the overall intervention as per the need of the student population and also at the same time would try to observe its efficacy in coping with stress, anxiety and depression.

## LIMITATIONS

The permission and the cooperation to be sought from schools was a herculean task. Moreover, the tool formulated was too large and it was time consuming.

## ABBREVIATIONS

DASS: Depression Anxiety Stress Scale
WHO: World Health Organisation
DAS: Depression anxiety stress
OCD: Obsessive Compulsion Disorder
APA: American Psychiatric Association

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