Impact of Anxiety and Stress on Social Interaction through the stages of Educational Transition

1Kirti Thukral, 2Deepshikha Gupta
1Occupational Therapy Intern, 2Assistant Professor of Occupational Therapy
Jamia Hamdard University

Abstract: To know the impact of anxiety and stress on social interaction through the stages of educational interaction is important as anxiety and academic stress when combined together put a great impact on the social life of any student as shown in this study. A total of 150 students divided into three groups of 50 each were taken as subjects. Three standardized questionnaires for anxiety, academic stress and social interaction respectively were filled by each group and the data was then analyzed by making correlational and comparative graphs and tables which concluded that if anxiety or academic stress increases in a student it will greatly influence the social interaction of the person.

Keywords: Anxiety, academic stress, social interaction, educational transition

Anxiety tends to lock up the brain, making school hard for anxious kids. Anxiety is an emotion that predates the evolution of man. Its ubiquity in humans, and its presence in a range of anxiety disorders, makes it an important clinical focus. In moderation, anxiety stimulates an anticipatory and adaptive response to challenging or stressful events. Moreover, anxiety destabilizes the individual and dysfunctional state results in occupational, biological and other impairments. (Indian journal of psychiatry, 2010 J.K. Trivedi & Pawan Kumar Gupta). Students struggle with different anxieties like separation anxiety, social anxiety, selective mutism, generalized anxiety, obsessive-compulsive disorder or specific phobias. Anxiety may also go hand in hand with learning disorders. (Child Mind Institute). An estimated 31.9% of adolescents had any anxiety disorder; it is higher for females (38%) than males (26.1%) (Anxiety and Depression Association of America). In 2017, the American College Health Association’s National College Health Assessment found that nearly 61% of college students felt overwhelming anxiety, a sharp increase from 50% in 2011. Anxiety is a relation to stress. Stress can be positive or negative. Stress is the body’s reaction to a trigger and is generally a short-term experience (Psycom). Stress is a fact of life, wherever you are and whatever you are doing; you cannot avoid stress, but you can learn to manage it. Changes in our lives- such as going to college, getting married, changing jobs, illness are frequent sources of stress, it is important to know and carefully consider the cause of stress. Changes in our lives- such as going to college, getting married, changing jobs, illness are frequent sources of stress, it is important to know and carefully consider the cause of stress.

Stress is the way human beings react both physically and mentally to changes, events and situations in lives. People experience stress in different ways and for different reasons. The reaction is based on the perception of the event or situation. If you view a situation negatively, you will feel distressed – overwhelmed, oppressed or out of control. The other form, eustress results from a positive view of an event or situation which is why it is also called ‘good stress’.

Causes of stress can be-

a) The unsettling effects of change
b) The feeling that an outside force is challenging you
c) The feeling that you have lost personal control
(national institute of mental health 2003)

Behavioral interaction during social situations is continuum of action, response and reaction. Temporal nature of social interaction creates a series of stressful situations, such as aggression, displacement from resources. Each social station is an adaptive response to a stressful social condition, resulting in unique behavioral responses. (Cliff H. Summers, 2002).

Social interaction is a dynamic, changing sequence of social actions between individuals or groups. It is an exchange between two or more individuals and is a building block. By interacting with one another people design rules, institutions and systems within which they seek to love. (lumen learning)

Interactions play an important role in learning. Students’ social interaction promote social competence, knowledge acquisition and inter-cultural understanding. Social interaction is positive in learning processes in a multicultural school/college environment. (Awal M. Alhassan).

Impairments in social and academic functioning differed across type and the number of anxiety disorders. Adolescents with anxiety disorders experience a range of significant problems in both social and academic functioning. 72.9% people suffer from psychological distress, 86.3% people suffer from anxiety and 79.3% people suffer from depressive symptoms 11

Socially anxious individuals receive less support from their partners during interaction. 15

A study done in 2017 stated that decreased stress predicted improved overall, academic, personal-emotional and social adjustment. Increased global, academic and social self-esteem predicted decreased depression and increased academic and social adjustment. (Laura J. Friedlander et al 2017)

Females had more effective time management behaviors than males but also experienced higher academic stress and anxiety. Males benefitted more than females from leisure activities. Freshmen had higher reactions to stress than juniors and seniors. Anxiety, time
management, and leisure activities may be an effective strategy for reducing academic stress in college students. (Ranjita Misra 2000)

Correlational analyses between social anxiety, social skills, aggression and stress revealed positive relationship between social anxiety with aggression and stress for males and negative relationship between social anxiety and social skills for females. Stress was the best predictor of social anxiety for males and social skills was the best predictor for females. (Al-Ali Majed 2011)

**METHOD**

**Participants**

A convenience sample of 150 male and female students was taken, further it was divided into three groups including 50 11th class students, 50 students of 1st year undergraduate course and 50 from 1st year postgraduate course. The students were chosen from regular courses who were not on any medical leave.

**MEASURES**

**Academic Stress Scale**: It is a 40-item rating scale that has been developed to identify the source of academic stress among students. This scale was originally developed and designed by Kim (1970). The scale was adapted to Indian conditions by Rajendran and Kaliappan (1990) and then again in 2012 by Balaji Rao. The participant has to tick mark against the appropriate column; for example, if the participant feels No Stress, mark against (NS), Slight Stress (SS), Moderate Stress (MS), High Stress (HS), Extreme Stress (ES). The rating scale is scored as 0-1-2-3-4. Therefore, 160 (4x40) is the maximum possible score and the highest score on each factor would be 32. Each factor has equal number of items. The higher the value of the score the more is the academic stress.

**Zung Self-Rating Anxiety Scale**: It is a method of measuring levels of anxiety, it focuses on most common general anxiety. It was designed by William W.K. Zung M.D. (1929-1992). It is a 20-item self-report assessment device built to measure anxiety levels, based on scoring in 4 groups of manifestations: cognitive, autonomic, motor and central nervous system symptoms. The raw score is then converted into Anxiety Index which interprets anxiety as 20-44 Normal range, 45-59 Moderate anxiety, 60-74 Marked to Severe anxiety, 75 and above Extreme anxiety. **Social Interaction Anxiety Scale**: It is self-report scale that measures distress when meeting and talking to others. It was developed by Mattick and Clarke’s (1998). It is a 20-item scale which is marked by the participant as 0- not all, 1-slightly, 2-moderately, 3-very, 4-extremely. The point value of the chosen answer choices is then summed to produce a total measure score which is then interpreted as 34+ probability of social phobia and 43+ probability of social anxiety.

**PROCEDURE**

Students of class 11th were asked to fill the academic stress scale, zung self-rating anxiety scale and social interaction anxiety scale which took them around 15-20 minutes. This 5-page questionnaire was filled by the students. Then the same set of questionnaires was filled by 50 students of undergraduate 1st year of different educational courses. 50 postgraduate course students were asked to fill all the three self-rating scales. All the questionnaires were taken and the score was calculated and then interpreted.

**DATA ANALYSIS**

The scores collected from each student were then analysed, in the case of quantitative variables, means and standard deviations were calculated. Correlation of academic stress scale with zung self-rating anxiety scale and social interaction anxiety scale was found out in each group. Similarly, correlation of zung self-rating anxiety scale was found out with academic stress scale and social interaction anxiety scale. Further, impact of academic stress and anxiety in all the three groups on social interaction was found by comparative analysis using t-test which was depicted showing graphs.

**RESULT (TABLES AND GRAPHS)**

**COMPARISON OF COMPONENTS AMONG DIFFERENT GROUPS**

**ZUNG SELF-RATING ANXIETY SCALE**

<p>| Table 1.1 - Comparison of ZSRA score between Group 1 and Group 2 |
|-----------------|------------------|-----------------|-----------------|</p>
<table>
<thead>
<tr>
<th><strong>GROUP</strong></th>
<th><strong>N</strong></th>
<th><strong>MEAN</strong></th>
<th><strong>S.D.</strong></th>
<th><strong>t-value</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>GROUP 1</td>
<td>50</td>
<td>36.84</td>
<td>7.651</td>
<td>0.786 NS</td>
</tr>
<tr>
<td>GROUP 2</td>
<td>50</td>
<td>38.04</td>
<td>7.608</td>
<td></td>
</tr>
</tbody>
</table>

The mean value for the score of ZSRA for group 1 is 36.84 with standard deviation of 7.651 and for group 2 is 38.04 with standard deviation of 7.608. The t-value is 0.786 suggesting the result to be non-significant which means anxiety is almost equal in both the groups i.e. the students transiting from class 10th to class 11th and from class 12th to undergraduate 1st year of college suffer from almost equal amount of anxiety.
Table 1.2 - Comparison of ZSRA score between Group 2 & Group 3

<table>
<thead>
<tr>
<th>GROUP</th>
<th>N</th>
<th>MEAN</th>
<th>S.D.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>GROUP 2</td>
<td>50</td>
<td>38.04</td>
<td>7.608</td>
<td>3.722*</td>
</tr>
<tr>
<td>GROUP 3</td>
<td>50</td>
<td>32.98</td>
<td>5.878</td>
<td></td>
</tr>
</tbody>
</table>

The mean value for the score of ZSRA for group 2 is 38.04 with standard deviation of 7.608 and for group 3 is 32.98 with standard deviation of 5.878.

The t-value is 3.722 suggesting the results to be significant at 0.05 level which means that students transiting from class 12th to undergraduate 1st year of college face more level of anxiety as compared to the students transiting from undergraduate course to postgraduate 1st year of college.

Table 1.3 - Comparison of ZSRA score between Group 1 & Group 3
The mean value for the score of ZSRA for group 1 is 36.84 with standard deviation of 7.651 and for group 3 is 32.98 with standard deviation of 5.878. The t-value is 2.829 suggesting the results to be significant at 0.05 level which means that students transiting from class 10th to 11th have more anxiety than the students transiting from undergraduate 1st year of college to postgraduate 1st year of college.

ACADEMIC STRESS SCALE

Table 2.1 - Comparison of ASS score between Group 1 & Group 2

<table>
<thead>
<tr>
<th>GROUP</th>
<th>N</th>
<th>MEAN</th>
<th>S.D.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>GROUP 1</td>
<td>50</td>
<td>61.56</td>
<td>26.140</td>
<td>1.607^NS</td>
</tr>
<tr>
<td>GROUP 2</td>
<td>50</td>
<td>53.76</td>
<td>22.255</td>
<td></td>
</tr>
</tbody>
</table>

The mean value for the score of ASS for group 1 is 61.56 with standard deviation of 26.140 and for group 2 is 53.76 with standard deviation of 22.255. The t-value is 1.607 suggesting the results to be non-significant which means that level of academic stress is almost equal among the students transiting from class 10th to 11th and students transiting from class 12th to undergraduate 1st year of college.
Table 2.2 - Comparison of ASS score between Group 2 & Group 3

<table>
<thead>
<tr>
<th>GROUP</th>
<th>N</th>
<th>MEAN</th>
<th>S.D.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>GROUP 2</td>
<td>50</td>
<td>53.76</td>
<td>22.255</td>
<td>3.722*</td>
</tr>
<tr>
<td>GROUP 3</td>
<td>50</td>
<td>46.68</td>
<td>25.493</td>
<td></td>
</tr>
</tbody>
</table>

*Inference* - The mean value for the score of ASS for group 2 is 53.76 with standard deviation of 22.255 and for group 3 is 46.68 with standard deviation of 25.493. The t-value is 3.722 suggesting the results to be significant at 0.05 level which means that students transiting from class 12th to undergraduate 1st year of college have more level of academic stress than students transiting from undergraduate course to postgraduate 1st year of college.
Table 2.3 - Comparison of ASS score between Group 1 & Group 3

<table>
<thead>
<tr>
<th>GROUP</th>
<th>N</th>
<th>MEAN</th>
<th>S.D.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>GROUP 1</td>
<td>50</td>
<td>61.56</td>
<td>26.140</td>
<td>2.882**</td>
</tr>
<tr>
<td>GROUP 3</td>
<td>50</td>
<td>46.68</td>
<td>25.493</td>
<td></td>
</tr>
</tbody>
</table>

Inference: The mean value for the score of ASS for group 1 is 61.56 with standard deviation of 26.140 and for group 3 is 46.68 with standard deviation of 25.493. The t-value is 2.882 suggesting the results to be significant at 0.01 level which means that students transiting from class 10th to class 11th have more academic stress than the students transiting from undergraduate course to postgraduate 1st year of college.
Table 3.1 - Comparison of SIAS score between Group 1 & Group 2

<table>
<thead>
<tr>
<th>GROUP</th>
<th>N</th>
<th>MEAN</th>
<th>S.D.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>GROUP 1</td>
<td>50</td>
<td>27.68</td>
<td>13.546</td>
<td>0.287 NS</td>
</tr>
<tr>
<td>GROUP 2</td>
<td>50</td>
<td>26.96</td>
<td>11.461</td>
<td></td>
</tr>
</tbody>
</table>

**Inference** - The mean value for the score of SIAS for group 1 is 27.68 with standard deviation of 13.546 and for group 2 is 26.96 with standard deviation of 11.461. The t-value is 0.287 suggesting the results to be non-significant which means that social interaction anxiety level is almost same in students transiting from class 10th to 11th and in students transiting from class 12th to undergraduate 1st year of college.

Table 3.2 - Comparison of SIAS score between Group 2 & Group 3
<table>
<thead>
<tr>
<th>GROUP</th>
<th>N</th>
<th>MEAN</th>
<th>S.D.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>GROUP 2</td>
<td>50</td>
<td>26.96</td>
<td>11.461</td>
<td>2.015*</td>
</tr>
<tr>
<td>GROUP 3</td>
<td>50</td>
<td>22.48</td>
<td>10.763</td>
<td></td>
</tr>
</tbody>
</table>

**Inference** - The mean value for the score of SIAS for group 2 is 26.96 with standard deviation of 11.461 and for group 3 is 22.48 with standard deviation of 10.763. The t-value is 2.015 suggesting the results to be significant at 0.05 level which means that students transiting from class 12th to undergraduate 1st year of college have more social interaction anxiety than the students transiting from undergraduate course to 1st year postgraduate college.

<table>
<thead>
<tr>
<th>GROUP</th>
<th>N</th>
<th>MEAN</th>
<th>S.D.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>GROUP 1</td>
<td>50</td>
<td>27.68</td>
<td>13.546</td>
<td>2.125**</td>
</tr>
<tr>
<td>GROUP 3</td>
<td>50</td>
<td>22.48</td>
<td>10.763</td>
<td></td>
</tr>
</tbody>
</table>

**Table 3.3 - Comparison of SIAS score between Group 1 & Group 3**

**Inference** - The mean value for the score of SIAS for group 1 is 27.68 with standard deviation of 13.546 and for group 3 is 22.48 with standard deviation of 10.763. The t-value is 2.125 suggesting the results to be significant at 0.01 level which means that there is an increased level of social interaction anxiety in students transiting from class 10th to class 11th than in the students transiting from undergraduate course to postgraduate course college.
CORRELATION BETWEEN ANXIETY, ACADEMIC STRESS AND SOCIAL INTERACTION AMONG ALL THE THREE GROUPS

Table 1.1 - Correlation of anxiety with social interaction in group 1

<table>
<thead>
<tr>
<th>SIAS</th>
<th>ZSRA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.241NS</td>
</tr>
</tbody>
</table>

NS - non-significant

Inference- There is no correlation of anxiety with social interaction in students of class 11th at Pearson’s coefficient of 0.241 which means that if a student has any level of anxiety it will not affect the social interaction of the student.
Table 1.2 - Correlation of anxiety with social interaction in group 2

<table>
<thead>
<tr>
<th>SIAS</th>
<th>ZSRA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.504**</td>
</tr>
</tbody>
</table>

** significant at 0.01 level

Inference - The correlation of anxiety with social interaction in students of undergraduate 1st year course is significant at 0.01 level of Pearson’s coefficient of 0.504** which marks that if anxiety level rises, it will increase the level of social interaction anxiety.

Table 1.3 - Correlation of anxiety with social interaction in group 3

<table>
<thead>
<tr>
<th>SIAS</th>
<th>ZSRA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.386**</td>
</tr>
</tbody>
</table>

** correlation significant at 0.01 level

Inference - There is a significant relation between anxiety and social interaction in students of postgraduate 1st year course at 0.01 level of Pearson’s coefficient of 0.386** which means that if anxiety level rises, level of social interaction anxiety will also rise.
Table 2.1- Correlation of academic stress with social interaction in group 1

<table>
<thead>
<tr>
<th>SIAS</th>
<th>ASS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.415**</td>
<td></td>
</tr>
</tbody>
</table>

** correlation significant at 0.01 level

Inference- The correlation of academic stress with social interaction is significant at 0.01 level of Pearson’s coefficient of 0.415** value in students of class 11th which makes academic stress directly related to social interaction anxiety. Hence, if academic stress rises, social interaction anxiety will also rise.
Table 2.2- Correlation of academic stress with social interaction in group 2

| SIAS | ASS  \\n|------|------|
|      | 0.665** |

**correlation significant at 0.01 level

Inference- There is a direct correlation between academic stress and social interaction in students of undergraduate 1st year course which is significant at 0.665** value of Pearson’s coefficient at 0.01 level i.e. rise in level of academic stress will also lead to rise in social interaction anxiety.

Table 2.3- Correlation of academic stress with social interaction in group 3

| SIAS | ASS  \\n|------|------|
|      | 0.325* |

*Correlation significant at 0.05 level

Inference- There is a correlation of academic stress with social interaction in students of 1st year postgraduate course at 0.325* level which is significant at 0.05 level of Pearson’s coefficient which marks a direct relation between the two, if academic stress level rises in the student, then level of social interaction anxiety will also rise.
RESULT
Comparison of anxiety, academic stress and social interaction anxiety values among all the three groups

**ZUNG SELF RATING ANXIETY SCALE**

The mean value for the score of ZSRA for group 1 is 36.84 with standard deviation of 7.651 and for group 2 is 38.04 with standard deviation of 7.608.

The t-value is 0.786 suggesting the result to be non-significant which means anxiety is almost equal in both the groups i.e. the students transiting from class 10th to class 11th and from class 12th to undergraduate 1st year of college suffer from almost equal amount of anxiety.

The mean value for the score of ZSRA for group 2 is 38.04 with standard deviation of 7.608 and for group 3 is 32.98 with standard deviation of 5.878.

The t-value is 3.722 suggesting the results to be significant at 0.05 level which means that students transiting from class 12th to graduate 1st year of college face more level of anxiety as compared to the students transiting from undergraduate course to postgraduate 1st year of college.

The mean value for the score of ZSRA for group 1 is 36.84 with standard deviation of 7.651 and for group 3 is 32.98 with standard deviation of 5.878.

The t-value is 2.829 suggesting the results to be significant at 0.05 level which means that students transiting from class 10th to 11th have more anxiety than the students transiting from undergraduate 1st year of college to postgraduate 1st year of college.

**ACADEMIC STRESS SCALE**

The mean value for the score of ASS for group 1 is 61.56 with standard deviation of 26.140 and for group 2 is 53.76 with standard deviation of 22.255.

The t-value is 1.607 suggesting the results to be non-significant which means that level of academic stress is almost equal among the students transiting from class 10th to 11th and students transiting from class 12th to undergraduate 1st year of college.

Inference- The mean value for the score of ASS for group 2 is 53.76 with standard deviation of 22.255 and for group 3 is 46.68 with standard deviation of 25.493.

The t-value is 3.722 suggesting the results to be significant at 0.05 level which means that students transiting from class 12th to graduate 1st year of college have more level of academic stress than students transiting from undergraduate course to postgraduate 1st year of college.

**Inference-** The mean value for the score of ASS for group 1 is 61.56 with standard deviation of 26.140 and for group 3 is 46.68 with standard deviation of 25.493.

The t-value is 2.882 suggesting the results to be significant at 0.01 level which means that students transiting from class 10th to class 11th have more academic stress than the students transiting from undergraduate course to postgraduate 1st year of college.
SOCIAL INTERACTION ANXIETY SCALE

Inference- The mean value for the score of SIAS for group 1 is 27.68 with standard deviation of 13.546 and for group 2 is 26.96 with standard deviation of 11.461. The t-value is 0.287 suggesting the results to be non-significant which means that social interaction anxiety level is almost same in students transiting from class 10th to 11th and in students transiting from class 12th to undergraduate 1st year of college.

Inference- The mean value for the score of SIAS for group 2 is 26.96 with standard deviation of 11.461 and for group 3 is 22.48 with standard deviation of 10.763. The t-value is 2.015 suggesting the results to be significant at 0.05 level which means that students transiting from class 12th to undergraduate 1st year of college have more social interaction anxiety than the students transiting from undergraduate course to 1st year postgraduate college.

Inference- The mean value for the score of SIAS for group 1 is 27.68 with standard deviation of 13.546 and for group 3 is 22.48 with standard deviation of 10.763. The t-value is 2.125 suggesting the results to be significant at 0.01 level which means that there is an increased level of social interaction anxiety in students transiting from class 10th to 11th than in the students transiting from undergraduate course to postgraduate course college.

CORRELATION BETWEEN ANXIETY, ACADEMIC STRESS AND SOCIAL INTERACTION AMONG ALL THE THREE GROUPS

There is no correlation of anxiety with social interaction in students of class 11th at Pearson’s coefficient of 0.241 which means that if a student has any level of anxiety it will not affect the social interaction of the student.

The correlation of academic stress with social interaction is significant at 0.01 level of Pearson’s coefficient of 0.415** value in students of class 11th which makes academic stress directly related to social interaction anxiety. Hence, if academic stress rises, social interaction anxiety will also rise.

The correlation of anxiety with social interaction in students of undergraduate 1st year course is significant at 0.01 level of Pearson’s coefficient of 0.504** which marks that if anxiety level rises, it will increase the level of social interaction anxiety.

There is a direct correlation between academic stress and social interaction in students of undergraduate 1st year course which is significant at 0.665** value of Pearson’s coefficient at 0.01 level i.e. rise in level of academic stress will also lead to rise in social interaction anxiety.

There is a significant relation between anxiety and social interaction in students of postgraduate 1st year course at 0.01 level of Pearson’s coefficient of 0.386** which means that if anxiety level rises, level of social interaction anxiety will also rise.

There is a correlation of academic stress with social interaction in students of 1st year postgraduate course at 0.325* level which is significant at 0.05 level of Pearson’s coefficient which marks a direct relation between the two, if academic stress level rises in the student, then level of social interaction anxiety will also rise.

DISCUSSION

Anxiety and academic stress have become an inseparable part of a student’s life nowadays; it brings a great impact on social life of a person. An individual may be unaware of the fact that stress and anxiety can be the cause of their distorted social life. Anxiety and stress may become a hindrance in normal life if remained unidentified; therefore, this research study entitled Impact of Anxiety and Stress on Social Interaction through the stages of educational transitions has been conducted to see how social interaction of a person gets affected if the person has any significant amount of either anxiety or stress or both.

150 subjects were taken in total which were then categorized under three groups; group 1- 50 students of class 11th, group 2- 50 students of 1st year undergraduate course and group 3- 50 students of 1st year postgraduate course. The purpose of the study was to analyze the correlation between the levels of anxiety, stress and social interaction using Zung Self Rating Anxiety Scale, Academic Stress Scale and Social Interaction Anxiety Scale respectively. Also, comparison between all the groups considering the three components was statistically done using t-test.

Zung-self rating anxiety scale (ZSRA) adapted from William W.K. Zung was filled by the subjects to evaluate the level of anxiety; it is a 20-component scale, which is scored as suggested in the study by M Samakouri et al in 2012[15]; which may range from 20(no anxiety at all) to 80(severe anxiety).

Academic Stress Scale developed by Rajendran and Kaliappan (1991) was filled by the subjects of the study and then it was assessed as done in the study conducted by Taruna Malhotra et al in 2018[18].

Social Interaction Anxiety Scale (SIAS), was filled by the participants, it is also a 20-item scale which is scored with the possible results as 34-42 indicating social phobia and a score of more than 43 indicates traditional social anxiety, the result was interpreted as suggested in the study conducted by Sarmishtha Dutta et al in 2018[17].

The values from all the scales of all the subjects were then statistically analyzed and correlation was interpreted by Pearson’s Test.
Correlation of ZSRA with ASS for group 1 was significant at the Pearson coefficient value of 0.543**: correlation of ZSRA with SIAS was non-significant at Pearson’s coefficient of 0.241; ASS is correlated with SIAS at significant value Pearson’s coefficient of 0.415**.

There is no correlation of anxiety with social interaction in students of class 11th at Pearson’s coefficient of 0.241 which means that if a student has any level of anxiety it will not affect the social interaction of the student.

The correlation of academic stress with social interaction is significant at 0.01 level of Pearson’s coefficient of 0.415** value in students of class 11th which makes academic stress directly related to social interaction anxiety. Hence, if academic stress rises, social interaction anxiety will also rise.

For group 2, correlation of ZSRA with ASS is non-significant at 0.248 coefficient value. ZSRA is correlated with SIAS at the significant coefficient value of 0.504**. Correlation of ASS with SIAS is significant at Pearson’s coefficient value of 0.665**.

The correlation of anxiety with social interaction in students of undergraduate 1st year course is significant at 0.01 level of Pearson’s coefficient of 0.504** which marks that if anxiety level rises, it will increase the level of social interaction anxiety.

There is a direct correlation between academic stress and social interaction in students of undergraduate 1st year course which is significant at 0.665** value of Pearson’s coefficient at 0.01 level i.e. rise in level of academic stress will also lead to rise in social interaction anxiety.

For group 3, ZSRA is correlated with ASS at non-significant value of 0.206; whereas correlation of ZSRA with SIAS is significant at Pearson’s coefficient of 0.386**, ASS is correlated with SIAS at 0.325* which is significant at 0.05 level.

There is a significant relation between anxiety and social interaction in students of postgraduate 1st year course at 0.01 level of Pearson’s coefficient of 0.386** which means that if anxiety level rises, level of social interaction anxiety will also rise.

There is a correlation of academic stress with social interaction in students of 1st year postgraduate course at 0.325* level which is significant at 0.05 level of Pearson’s coefficient which marks a direct relation between the two, if academic stress level rises in the student, then level of social interaction anxiety will also rise.

Significant correlation results mark the levels of anxiety and academic stress in students of different groups.

**The result of the present study suggested** that there is a significant positive correlation between all the components which marks that anxiety and stress if increased due to any factor will lead to disturbed social interaction of a student. If the anxiety level is increased in a student, hence it will lead to decreased social interaction. According to this study, social interaction is correlated to stress indirectly as when stress is increased, social interaction of student will be decreased. Anxiety and stress may also simultaneously affect the social interaction of student be it class 11th, 1st year undergraduate course or 1st year postgraduate course.

The correlation results of the study are congruent with the results of the study conducted by Vaidya et al in 2007 that there is same level of academic stress between both the groups.

Comparative graph for comparison of group 1 and group 3, for ASS had a significant relation at 0.01 level for t-value of 2.882** which marked the increased level of anxiety in class 11th students as compared to the students of 1st year postgraduate course.

For the score of ASS, comparative graph for group 1 and 2 had a non-significant t-value of 1.607, which means that there is almost same level of academic stress between students of class 11th and undergraduate course 1st year students.

Comparative graph for group 2 and group 3 for ASS score, had a non-significant relation with the t-value of 1.479 which means that there is same level of academic stress between both the groups.

Comparative graph for the score of SIAS, comparative graph for group 1 and 2 had a non-significant result with t-value of 0.287 which indicates the same level of social interaction between both the groups.

Comparative graph for the score of SIAS for group 2 and group 3 had a significant relation at t-value of 2.015* which is significant at 0.05 level which marks the increased level of social anxiety in students of 1st year undergraduate course as compared to students of 1st year postgraduate course.

In the comparison of group 1 and group 3, SIAS score had a significant relation at t-value of 2.125** significant at 0.01 level which indicates the higher level of social interaction anxiety in students of class 11th as compared to the students of 1st year postgraduate course.

The overall result of comparison between all the components among the three groups was found out that the anxiety was marked to be the highest in the students of class 11th and then in the students of 1st year undergraduate course and the lowest in the students of postgraduate course 1st year.
For the academic stress that was evaluated by the academic stress scale, highest level of academic stress was found in the students of class 11th and on the other hand, there was no significant difference in the level of academic stress in the students of 1st year undergraduate and postgraduate students.

Social interaction anxiety was found to be the highest in the students of class 11th and then in students of 1st year undergraduate course and the lowest in the students of 1st year postgraduate course.

**The comparative result of the present study** suggests that the students of class 11th have more levels of anxiety and stress as compared to those of undergraduates and postgraduates, thereby impacting the social interaction in class 11th students more than other two groups.

Likewise, a study conducted by Nazma Sultana et al in 2009 revealed that only 1% participants were free from any psychological stress. Over one-third i.e. 34.6% had mild stress; 39.8% had moderate stress and about one-fourth 24.9% had severe stress. A significant proportion of male respondents 73% had moderate to severe psychological distress as compared to female respondents i.e. 56%.

**CONCLUSION**

The results of the study entitled ‘Impact of Anxiety and Stress on Social Interaction through the stages of educational transition’ suggests that anxiety and stress have a great impact on social interaction of students of class 11th, 1st year undergraduate course and 1st year postgraduate course respectively. Due to any cause if anxiety and stress increase in a person, thereby social interaction anxiety of a person is also increased as suggested in study conducted by Shishir Paudel titled Depression, Anxiety and Stress among the Undergraduate Students. Similarly, the correlational results of this study suggest that there is altogether, a positive correlation between anxiety and social interaction, likewise, between academic stress and social interaction. There is a non-significant correlation of anxiety with social interaction anxiety in students of class 11th, but a positive correlation stands strong among students of 1st year undergraduate and postgraduate course respectively. There is no correlation of anxiety with social interaction in students of class 11th, whereas, the correlation of anxiety with social interaction in students of undergraduate 1st year course is significant which marks that if anxiety level rises, it will increase the level of social interaction anxiety and there is also a significant relation between anxiety and social interaction in students of postgraduate 1st year course which means that if anxiety level rises, level of social interaction anxiety will also rise. The correlation of academic stress with social interaction is significant which makes academic stress directly related to social interaction anxiety. Hence, if academic stress rises, social interaction anxiety will also rise. There is a direct correlation between academic stress and social interaction in students of undergraduate 1st year course which is significant i.e. rise in level of academic stress will also lead to rise in social interaction anxiety. There is a correlation of academic stress with social interaction in students of 1st year postgraduate course which is significant and marks a direct relation between the two, if academic stress level rises in the student, then level of social interaction anxiety will also rise. Another study conducted by Prabhuswami titled Depression, Anxiety and Stress among newly admitted undergraduate nursing students. The comparative result of this study suggests that the students of class 11th have more levels of anxiety and stress as compared to those of undergraduates and postgraduates, thereby impacting the social interaction in class 11th students more than other two groups. Maximum level of anxiety was observed in the students of undergraduate 1st year course and was least in students of 1st year postgraduate course. Similarly, for academic stress, 1st year undergraduate students have more academic stress than students of postgraduate 1st year course and students of class 11th have almost same amount of academic stress as undergraduate 1st year students, and the least amount of stress was observed in 1st year postgraduate students. Social interaction anxiety was the highest in students of class 11th and undergraduate 1st year students and it was the minimum in 1st year postgraduate students.

**REFERENCES**


[3] Yeji Hawang, Association between social support and anxiety in older adults new to long-term services and supports, Innovation in ageing, 2019, volume 3, 164


