A Comparative Study of Male and Female Undergraduate Learners Receiving Varied Instructional Teaching Strategies with Respect to Academic Anxiety

Abhishek Narayan Pathak

Abstract: The purpose of this study was to investigate the difference between male and female undergraduate learners receiving varied instructional teaching strategies with respect to academic anxiety. A sample of undergraduate 58 boys and 58 girls studying at Institute of Management Nirma university of Ahmedabad city was randomly selected. For the present study the researcher used a self-constructed questionnaire to study the academic anxiety of male and female undergraduate learners receiving varied instructional teaching strategies. Mean, S.D. and T-test were calculated to analyse the data. The findings reveal that male and female students do not significantly differ with respect to academic anxiety. And both male and female undergraduate students have moderate level of academic anxiety receiving varied instructional teaching strategies in the classroom.

I. INTRODUCTION

A. Academic Anxiety

It is seen that students nowadays are dealing with the difficulties of academic anxiety due to the rapid changes occurring in many aspects of their life. In the age of technological advancement students are constantly struggling with academic anxiety, although many of them are unaware of it.

Miachael T.Barta (2010) states that at certain point of time each college student experiences stress and worry. This tension could be caused by having to give a speech or presentation in front of the class, or by performing in front of the entire college. Sometimes students become nervous every time they step into a strict teacher's classroom. Perhaps they have experienced stress in the past while attempting to complete an assignment in a subject that is not their area of expertise. Anxiety is being stressed out, whether because you have a lot on your plate or because you are concerned that what you have on your plate is being done correctly. It is not uncommon to feel under pressure in college. College is where you learn new abilities, and professors use varied instructional teaching strategies such as group assignments, projects, presentations, peer-to-peer learning, flip-classroom as well as quizzes, to assess how well you're learning and applying these skills. Thus, one such common cause of rising academic anxiety in students is the inability to cope up and adjust with the use of varied instructional strategies in the classroom.

of breath, or dizziness also panic attacks can strike at any time.

B. Varied Instructional Teaching Strategies

Teachers use instructional strategies to help students become independent, strategic learners. These strategies become learning strategies when students choose them on their own and use them effectively to complete tasks or meet goals.

- Group Discussions

Larkin and Pines (2003) suggested that attempting to incorporate students in class discussions can have unintended consequences, leading to avoidance behavior. They do, however, provide numerous techniques for eliciting student participation while addressing teenagers' concern of being embarrassed, suffering social rejection, and performing poorly in public. The ability of learners to participate in group discussions is one of the elements recognized to have a favourable link with their academic progress as cited in Murunga Felicity, (2018).
Individual Oral Presentations

According to Farahdila Anggita and Tono Suwartono, (2020) the majority of educational institutes need oral presentations in courses. These can be really beneficial learning opportunities, but giving an oral presentation in class can be difficult for students. Not only are they nervous about speaking in front of an audience or group, but many of them have had little training in what constitutes an effective presentation. Oral presentations have long been used in higher education by university lecturers for a variety of pedagogical goals. These include giving students the confidence to speak in front of an audience, allowing them to practice specific presentation skills and communicate information to their classmates, allowing them to take ownership of classroom subject matter, and sharing information from personal experience, research, and classroom textbooks.

Assignments and Project Work

According to Admin, (2017) the stress to complete your assignments and project works and achieve higher scores can result in academic anxiety among students. They give college students numerous, complex assignments with demanding deadlines practically every day. As a result, assignments have a negative impact on some students' lives outside of college, where activities, friends, and family are important.

II. LITERATURE REVIEW

The researcher reviewed many researches on academic anxiety and some of them closely related to the present study are as follows:

- Prakash, Tamizh, Hemalatha, Bhavna, & Kenneth. (2021) conducted research on online test anxiety and exam performance of international Baccalaureate Diploma Programme (IBDP) students under E-proctored exams during covid-19 and found that a mild negative relation between online exam anxiety and academic performance of IBDP STEM students.

- Escalera-Chávez, Ramos-Hernández, Molchanova, & García-Santillan. (2021) performed research on Mathematics as an Academic Discipline that Generate Anxiety in College Students and the results indicated that Anxiety over mathematics is the same in men and women; there are no variances based on age or major, but there is a difference based on the course that the student attends.

- Shakir, (2014) conducted research to investigate the relationship and impact of academic anxiety on student academic achievement. A sample of 352 high school seniors’ students was chosen using the random sampling technique. The study's findings demonstrated an inverse link (negative correlation) between students' academic achievement and academic anxiety.

- Rao & Chaturvedi. (2017) conducted a study on secondary school students' academic anxiety in relation to gender and locality with a sample size of 500 students of 9th grade. In their study it was found that there is no statistically significant mean difference in academic anxiety between boys and girls in Class IX of secondary school. However, there is a considerable mean difference in academic anxiety levels between class-IX students from rural and urban secondary schools.

- Rehman (2016) conducted an exploratory study on academic anxiety among higher education students of India and its causes and preventive measures. In his findings he found that personal, familial, institutional, social & political factors were identified as potential threat to provoke severe academic anxiety among students.

- Mahajan. (2015) conducted a study on Secondary School Students’ Academic Anxiety in Relation to Parental Encouragement with a sample size of 120 Xth grade students. The study's findings revealed that parental encouragement was strongly and negatively connected with academic stress. Academic anxiety did not differ significantly between male and female secondary school students, but there was a significant difference between government and private school teaching staff.

- The above-mentioned studies commonly indicated that academic anxiety has a negative impact on students’ academic performance irrespective of gender.

III. RESEARCH GAPS

- In the researches reviewed by the researcher academic anxiety has been used as an independent variable but in the present study the researcher has used academic anxiety as a dependent variable in which the impact of varied instructional strategies will be seen on it.

- After reviewing the literature researcher found that mostly the researches have been conducted on science and math students with respect to academic anxiety but present study is conducted on the BBA students to see the effect of their academic anxiety by using varied instructional strategies in the classroom.

- Researcher also found that mostly the researches was conducted to find relationship between academic anxiety and academic performance of the student, the causes of academic anxiety among college and school students, and a comparative study of academic anxiety among female or male students but researcher could not find any researches done in the field to find the relationship between academic anxiety caused in students by using varied instructional techniques by the teacher in a classroom therefore the researcher find this gap and decided to conduct his research in this area.

A. Variables of the Study

- The Study Includes the Following Variables:

  - Independent Variable- Varied Instructional Teaching Strategies
  - Dependent Variable- Academic Anxiety
  - Control Variable- Age group 18-22, Undergraduate level students
B. Statement of the Problem
The current study is a comparison of academic stress among male and female undergraduate students who are receiving various instructional teaching strategies.

C. Objective of the Study
➢ **The Study is Conducted by Taking the Following Objectives into Consideration:**
- To analyze the level of academic anxiety in male undergraduate students exposed to various instructional teaching strategies.
- To analyze the level of academic anxiety in Female undergraduate students exposed to various instructional teaching strategies.
- To study difference between male and female undergraduate learners receiving varied instructional teaching strategies with respect to academic anxiety.

D. Hypothesis of Study
➢ **The Below Stated Hypotheses are Verified in the Present Study:**
- $H_0$ - There is moderate level of academic anxiety in male students with reference to academic anxiety receiving varied instructional teaching strategies.
- $H_0$ - There is moderate level of academic anxiety in female students with reference to academic anxiety receiving varied instructional teaching strategies.
- $H_0$ - There is no significant difference between male and female students with reference to academic anxiety receiving varied instructional teaching strategies.

E. Methodology of the Study
➢ **Method of the Study**
In the present study descriptive survey method was used.

➢ **Sample**
A sample of 58 boys and 58 girls studying at undergraduate college level were selected on random basis for the study.

➢ **Procedure of Sampling**
Population of the study comprise of undergraduate learners of Ahmedabad city. The selection of the institute was done using purposive sampling and the students were selected using random sampling method.

➢ **Instrument of the Study**
For the present study the researcher used a self-constructed questionnaire to study the academic anxiety of male and female undergraduate learners receiving varied instructional teaching strategies.

F. Delimitations of the Study
➢ **The Study is Delimited to the Following Criteria**
- The study is conducted on the students who belong to age group 18-22 years.
- The study is performed on a sample of 116 students.
- The students studying in NIRMA university were taken as a sample of the study.
- The study is limited to Ahmedabad city only.

IV. FINDINGS

Table 1: Means, Standard Deviations for Males and Females, and Their T-Value

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>T-Value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>58</td>
<td>45.76</td>
<td>7.84</td>
<td>1.91</td>
<td>Not significant at 0.05 Level.</td>
</tr>
<tr>
<td>Female</td>
<td>58</td>
<td>48.81</td>
<td>9.27</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Graph 1: Mean Score Comparison Graph for Male and Female

Academic anxiety with respect to varied instructional teaching strategies
It is quite clear from the table that mean academic anxiety score of Male undergraduate college students is 45.76 and S.D. is 9.27. The mean academic anxiety score of Female undergraduate college students is 48.81 and S.D. is 9.27. The analysis of mean value shows close proximity that leads to conclude that Male and Female students do not differ significantly with respect to academic anxiety receiving varied instructional teaching strategies in classroom.

The t-value is found to be 1.91 which is less than the corresponding table value at 0.05 level of significance i.e. (1.98). Thus, our Null Hypothesis is true therefore there is no significant difference between male and female students with reference to academic anxiety receiving varied instructional teaching strategies.

Table 2: Academic Anxiety Levels Based on Mean Score Values

<table>
<thead>
<tr>
<th>Range of Mean Scores</th>
<th>Level of Academic Anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-40</td>
<td>Low</td>
</tr>
<tr>
<td>40-60</td>
<td>Moderate</td>
</tr>
<tr>
<td>60-80</td>
<td>High</td>
</tr>
</tbody>
</table>

The mean academic anxiety score of Male undergraduate college students is 45.76 thus we can say that their level of academic anxiety is moderate. Similarly mean academic anxiety score of females’ undergraduate college students is 48.81 thus we can say that their level of academic anxiety is also moderate. Thus, are Null Hypothesis is true which states that Moderate level of academic anxiety is found in Male and Female undergraduate students receiving varied instructional teaching strategies in classroom.

V. CONCLUSION

Based on our findings, we cannot conclude that males are more prone to academic anxiety than females. It could be attributed to the explanation that academic anxiety, defined as a feeling of worry, nervousness, or unease when giving an oral presentation, participating in a group discussion, or working on a project, is a subjective trait that is unaffected by personal characteristics such as gender, age, and so on. We can also conclude that neither male nor female students are completely free of academic anxiety; both genders experience some level of academic anxiety. However, it is possible that some students experience more anxiety when giving oral presentations, participating in group discussions, and so on, while others experience very little. This could be due to the different external environments from which these students come. Furthermore, biological factors play an important role in determining the level of academic anxiety in students. For example, if one's parent is more extraverted, his or her child may feel less anxious when giving a presentation or participating in a group discussion in front of the class.

REFERENCES

UNDERTAKING

I, the undersigned, Abhishek Narayan Pathak hereby assure that this research paper entitled “A comparative study of male and female undergraduate learners receiving varied instructional teaching strategies with respect to academic anxiety” is my own work. The research paper submitted is original to the best of my knowledge.

I have mentioned the references as and when used.

Thanks, and regards,
Abhishek Narayan Pathak
<table>
<thead>
<tr>
<th>S.No</th>
<th>Statement</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 p</td>
<td>I feel very confident while giving oral presentations in front of my class.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 n</td>
<td>I am thoughtful and stressed before volunteering for any group activity in my class.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 n</td>
<td>I feel that assignments are a burden and source of mental fatigue for me.</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>4 n</td>
<td>I feel increased heartbeat and dry mouth while giving individual presentations.</td>
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<td></td>
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<tr>
<td>5 n</td>
<td>I avoid the situation and want to remain silent during any group discussions or activity.</td>
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</tr>
<tr>
<td>6 p</td>
<td>I want to take maximum opportunities while participating in group discussion and oral presentations.</td>
<td></td>
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<tr>
<td>7 p</td>
<td>I feel good after giving an oral speech, participating in group discussion and working on an assignment.</td>
<td></td>
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</tr>
<tr>
<td>8 p</td>
<td>I always want to be a leader in all the group presentations and activities of the class.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>9 n</td>
<td>I feel anxious and worrisome to complete my assignments within a stipulated timeframe.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 n</td>
<td>I think Varied instructional strategies are major source of anxiety and stress for students.</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>11 p</td>
<td>I feel oral presentations, group discussion and assignments release the anxiety and stress of the students.</td>
<td></td>
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<tr>
<td>12 n</td>
<td>If suddenly the teacher asks me to give a presentation or short speech, I feel anxious and always gives excuses to avoid the situation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Statement</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 n</td>
<td>Due to poor presentation skills, I feel oral presentations and group discussions are a cause of anxiety for me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 p</td>
<td>I want the teacher to teach using Varied instructional strategies because I feel very comfortable and happy to learn using such innovative methods.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>15 n</td>
<td>I want my teacher to only use traditional methods of teaching where I get less opportunities to speak and participate.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 n</td>
<td>I feel stressed writing long assignments and thus prefer to copy it from my friends.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 n</td>
<td>Whenever there is some oral presentation or group discussion, I remain absent from the class.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>18 n</td>
<td>Announcement of the topic of assignment is a cause of worry for me and I keep thinking about it most of the time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 p</td>
<td>I am able to release stress and anxiety while writing assignments and discussing over them.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 n</td>
<td>I feel sleeplessness and loss of appetite one day prior any oral presentation group discussion or submitting the assignments.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Unpaired t test results

P value and statistical significance:

The two-tailed P value equals 0.0581

By conventional criteria, this difference is considered to be not quite statistically significant.

Confidence interval:

The mean of Males minus Females equals -3.05

95% confidence interval of this difference: From -6.21 to 0.11

Intermediate values used in calculations:

\[ t = 1.946 \]
\[ df = 114 \]
\[ \text{standard error of difference} = 1.594 \]

Review your data:

<table>
<thead>
<tr>
<th>Group</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>45.76</td>
<td>48.81</td>
</tr>
<tr>
<td>SD</td>
<td>7.84</td>
<td>9.27</td>
</tr>
<tr>
<td>SEM</td>
<td>1.03</td>
<td>1.22</td>
</tr>
<tr>
<td>N</td>
<td>58</td>
<td>58</td>
</tr>
</tbody>
</table>