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TEST ANXIETY IN HIGHER SECONDARY STUDENTS

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ABSTRACT This is a study to check whether the higher secondary school students have test anxiety or not. Test Anxiety Scale by Nist and Diehl (1990) was administered to one hundred and sixty 11th standard students (92 boys and 68 girls) just before the first mid-term exams as pre-test. After pre-test, the students were given training in learning methods, memory techniques and relaxation continuously till the end of the year. At the end of the academic year, before the final exams, test anxiety was assessed (post-test) and compared with initial assessment.

The results revealed that majority (73%) of the total sample experienced moderate test anxiety and very few (3%) experienced severe test anxiety during pre-test. After intervention, only 49% of the total sample experienced moderate test anxiety. 51% was found to have mild test anxiety. The mean difference in test anxiety before and after intervention was found to be significant at 0.025 level (F=1.1476). Test anxiety was found to be significantly higher in girls (M=25.49) than that of the boys (M=23.59). After intervention, it is seen that the test anxiety of the boys and girls decreased significantly (Boys-M=19.46 and girl-M=20.75). The findings reveal that test anxiety of the sample of this study was reduced because of the intervention provided and further, it is presumed that test anxiety could be reduced considerably, if suitable psychological techniques are given to the students at the right point of time.

KEYWORDS : Higher secondary students, Test Anxiety, Psychological intervension, Gender difference.

INTRODUCTION

Anxiety is an emotional state when an individual perceives an impending danger in situations. Hence, test anxiety is also an emotional state. It is an accepted fact that, prior to the exams, students undergo a lot of stress, which generally results in anxiety, called Test Anxiety. Most students get nervous before they take an important test, but some people experience an intense fear or worry known as test anxiety. Test anxiety is a type of performance anxiety, because there is pressure to do well in a specific situation (Smith, 2019). It is normal to feel a little nervous and this anticipation can actually help one do better on a test. But for some people, test anxiety is more intense. The nervousness they feel before a test can be so strong that it interferes with their concentration or performance (Hoffses, 2018).

Higher secondary examination is the most crucial examination as it decides the future job and academic opportunities. Its excessive pressure creates stress and strain and brings anxiety, nervousness, tension etc. among students. Test anxiety is a major area of concern among students nowadays (Goswami and Roy, 2017).

Here in this study, the research is confined only to the effect of Psychological intervention given to 11th standard students regarding test anxiety. The level of test anxiety among 11th standard students of the selected school was assessed before their first term examinations (pre-test). Then psychological intervention in the form of memory improving techniques and relaxation techniques were given. As a supplement for continuing practice, Printed and Audio materials were provided. This was continued till the end of the academic year. At the end, test anxiety of the students was again assessed (post-test) and compared with the initial levels.

Need and significance of the study: Present world is much competitive. Every person are very keen about getting a better education and good job .For all these, marks achieved in the academic examination as well as in competitive examinations are very much important.

Due to the anxiety about the outcome of the results students are much anxieted. some times these anxieties go up to a level of hindering the actual level of the persons academic performance. This may lead to lowering of the grades which in turn would snatch away the opportunities he or she may actually deserve .Psychological intervension only could play a remedial role in handling this problem. Hence this study on Test Anxiety in higher secondary students is significant.

Statement of the problem: A study on the level of Test anxiety experienced by Higher Secondary Students and the effect of psychological intervension.

Objectives

- To measure the test anxiety level of the selected 11th standard students.
- To find out whether there is any significant difference in the level of Test Anxiety before and after psychological intervention.
- To find out the gender difference in test anxiety before and after intervention.

Hypothesis

The selected Higher secondary school students experience Test Anxiety moderately.

Due to Psychological intervension there is reduction in the test anxiety level of selected Higher Secondary school students.

There is gender wise difference in the effect of psychological intervension.

Method and Procedure

Sample

One hundred and sixty eleventh standard students from Basel Evangelical Higher Secondary School, Palakkad, Kerala were selected using Convenience Sampling as the sample for the study.

Tools

The Test Anxiety Scale (TAS) (Nist and Diehl, 1990:1) containing 10 items was administered to measure the degree of test-taking anxiety. The items are answered using a 5-point scale namely never, rare, sometimes, often and always. The reliability and validity of this tool had established by computing Cronbach's Alpha coefficient, which is found to be 0.762, significant at 0.01 level. Hence, the test is both valid and reliable.

Procedure for data collection;

Permission was obtained from the BEM Higher secondary school authorities and the purpose of the study was briefed to the 11th standard students. They were told that those who were not interested may absolve from the procedure. Only those who came forward voluntarily were taken in to the fold of this study. One hundred and sixty interested students were selected as the sample for this study. Initially, they were given the Test Anxiety scale as pre-test and after this, psychological intervention (memory improvement techniques, relaxation training and autosuggestions) was given. After the intervention and just before the final examinations, the same test anxiety scale was administered

again to the same sample as post-test and the scores were determined. Final year examination marks of the sample were also collected for comparison.

Statistical Techniques Used

Mean, Standard deviation and F –ratio are the statistical techniques used in this study.

Review of Literature

Choudhury (2019) investigated examination anxiety among a randomly selected 300 secondary school students (Male = 140 and Female=160) from fifteen secondary schools of Tinsukia District, Assam. The study revealed that nearly 39.67 % of the secondary school students had high or extremely high level of anxiety about their examination. Besides, a significant difference was also observed between the male and female students with respect to their examination anxiety. Female students displayed more anxiety in comparison to their male counterparts. Further, the study demonstrated that there was a significant difference in Examination anxiety of secondary school students in terms of their locality and management type of institution.

Rozek, Ramirez, Fine and Beilock (2019) followed 1,175 high school biology students for a year to study how stress affected their ability to pass major exams. They noticed that low-income students were disproportionately harmed by difficulty regulating test anxiety. But 10-minute writing exercises (Expressive writing and Stress reappraisal) encouraged students to let go of negative thoughts, regulate their emotions, and reinterpret stress as a positive force helped them perform better. Both types of exercises proved to be effective at boosting student achievement, especially that of low-income students. The achievement gap between low- and high-income students decreased by 29 percent, and the course failure rate for low-income students was cut in half, making this intervention a potentially valuable tool for increasing equity.

Yusefzadeh, Amirzadeh Iranagh and Nabilou (2019) did a quasi-experimental study and investigated the effect of study preparation on reducing test anxiety and improving the performance of public health students at Urmia University of Medical Sciences, Urmia, Iran, in the academic year 2016–2017. All second- and third-year bachelor's students in public health major were assigned into the intervention (n=20) and control groups (n=25). The assignment was based on the study preparation items and the defined benchmark. Data on general stress and test anxiety were collected by subjective self-assessment via paper-and-pencil surveys in the first week of the semester and before the final exam, respectively. No significant difference was found in the level of general stress between the two groups at the beginning of the semester (p=0.55) based on the study preparation items. The level of test anxiety in the intervention group (47.90) was lower than in the control group (34.64) at the end of the semester (p=0.001). The mean value of exam scores was higher in the intervention group (p=0.015). The intervention reduced the level of test anxiety and improved the performance of students.

Manchanda, Bhave, Ola and Puri (2018) conducted a cross sectional experimental study comprising of low-middle socioeconomic status of co-ed school in Delhi, where in 165 school children of (9th STD) were chosen out of which 65 were male and 65 were female students. The sample was divided into Group A 10 - 14 yrs and Group B 15 - 18 yrs. Results indicated that both girls and boys showed examination anxiety (e.g. > 7). Higher scores were seen in Group B (15 - 19 yrs) in both boys and girls but P values were not significant. Total anxiety score was higher in girls but not significant and also it was seen that there was no significant difference in the sub-scores. The conclusion is that both girls and boys showed examination anxiety but are not significant enough.

RESULTS AND DISCUSSION

Table I: Level Of Test Anxiety Of The Sample Before Intervention And After Intervention

(N=160)

Level Of Test Anxiety	Before Intervention		After Intervention	
	Frequency	Percentage	Frequency	Percentage
Low	0	0	0	0
Mild	39	24	81	51
Moderate	117	73	79	49
Severe	4	3	0	0

Percentages are rounded off

From Table I, it is pleasing to note that only negligible percentage (3%) of the sample had Severe Test Anxiety before intervention. An alarming majority (73%) of the sample experienced Moderate level of Test Anxiety. Mild Anxiety was felt by 24% of the sample. These students may not much easily distracted during a test nor did they experience difficulty with comprehending the lessons.

After intervention, it is very satisfying to observe that even the negligible percentage who had experienced Severe Test Anxiety had been erased out. Those experiencing Moderate Test Anxiety had also been brought down to 49%. Mild Anxiety was experienced by 51% of the sample. The table, thus indicates that the psychological intervention had been effective in bringing down the level of test anxiety of the sample.

Table II: Mean Difference In Test Anxiety Of The Sample Before And After Intervention

Test	Mean score	Standard deviation	F Value	Significance 0.05 level
Before intervention	24.34	6.2223	1.147616	-Ve
After intervention	19.86	5.998		

F - Critical value for 0.05 level is 1.299101
F - Critical value for 0.01 level is 1.448624

Table II reveals that the mean test anxiety of the sample before intervention was Moderate (M=24.34) and that it was nearing Low (M=19.86) after intervention. There is much reduction in the mean test anxiety of the sample before and after intervention, indicating that the psychological intervention was very effective in bringing down the level of test anxiety. However, the " F" value arrived (1.147616) is not statistically significant and so, though the psychological intervention had been effective in reducing the mean test anxiety, the mean difference cannot be considered as strong enough.

Table III: Significance Of Mean Difference In Test Anxiety Among Boys And Girls Before Intervention

Gender	Mean test anxiety	Standard Deviation	F Value	Significance 0.05 level
Boys	23.59	5.7462	1.511829	+Ve
Girls	25.49	6.9271		

F - Critical value for .05 level is 1.448581
F - Critical value for .01 level is 1.689876

Table III shows that before intervention, the mean test anxiety of the boys was 23.59 and that of the girls was 25.49. Female students reported slightly higher level of test anxiety as against their male counterparts. There was a statistically significant mean difference in the test anxiety (F value was 1.511829) of the male and female students of this study at 0.05 level.

Similar results have been obtained in the study by Farooqi, Ghani and Spielberger (2012), who investigated gender differences in test anxiety and academic performance of 150 medical students (75 males and 75 females) from the Services Institute of Medical Sciences. The results suggested that the female medical students reported significantly higher test anxiety level as compared to the male medical students ($t = -5.02$, $df = 148$, $^{**}p < .01$). The male medical students achieved statistically significant higher GPAS as compared to the female medical students ($t = 3.66$, $df = 148$, $^{**}p < .01$). Significant negative relationship was found between test anxiety and academic performance of medical students.

Table IV: Significance Of Mean Difference In Test Anxiety Among Boys And Girls After Intervention

Gender	Mean test Anxiety	Standard Deviation	F Value	Significance 0.05 level
Boys	19.46	6.1384	1.405079	Nil
Girls	20.75	5.1785		

F – Critical value for .05 level is 1.466778
F – Critical value for .01 level is 1.723571

Table IV shows that after intervention, the mean test anxiety of the

boys was 19.46 and that of the girls was 20.75. Though the psychological intervention was effective in reducing the test anxiety of the males and females between the two testing conditions, the calculated F value (1.405079) indicated statistically insignificant mean difference after intervention. When compared with the results in table III, it can be understood that the test anxiety scores have considerably dropped for both the genders. Anyway, it is clear that the impact of psychological intervention had been the same for the male and female students of this study.

The following study also presents similar results. Nunez-Pena, Pellicioni and Bono (2016), who examined gender differences in test, trait, and math anxiety among 168 Barcelona university students, as well as differences in their academic achievement. Compared with their male counterparts, female students reported higher levels of test, math, and trait anxiety, as well as greater expected anxiety in three of the four test situations considered. However, females did not show lower academic achievement than male students in either the open-question or the multiple-choice exams.

MAJOR FINDINGS

From the above tables, it could be seen that test anxiety of majority of the higher secondary students was Moderate or Healthy. It is also found that test anxiety could be managed effectively through proper psychological training. When the test anxiety levels were assessed after intervention, the encouraging factor was that test anxiety in general had reduced narrowly from an unhealthy to a healthy level. The change in the scores indicates the appreciable outcome of the psychological intervension. These results indicate that after intervention, the sample were very close to free from test anxiety.

CONCLUSION

Hence this study conclude there is Test anxiety among Higher secondary students but only few are above the severe level.In the case of gender difference Girls and boys significantly differ in test anxiety levels. Psychological intervension can reduce the level of test anxiety. The significant difference between boys and girls can be erased off by psychological intervensions.

Limitations

Sample size was moderate. This study was confined only to 11 th standard students. Still this study help to provide some insight in to the importance of psychological intervension regarding Test Anxiety.

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