

# RESEARCH AND REFLECTIONS ON EDUCATION

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- ☛ *Utilization of Library Information Resources among the Faculty Members and Students*
- ☛ *A Study on Lateral Thinking and Academic Achievement*
- ☛ *Risk-Taking Behaviour and Achievement in Mathematics*



  
Principal  
St. Xavier's College of Education  
(Autonomous)  
Palayamkottai - 627 002



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(Autonomous)  
Palayamkottai - 627 002



# RELATIONSHIP BETWEEN EXAMINATION ANXIETY AND ACADEMIC ACHIEVEMENT OF 12<sup>TH</sup> STANDARD STUDENTS

Research  
Paper

## ABSTRACT

*The paper investigated the relationship between examination anxiety and academic achievement of 12<sup>th</sup> standard students. The researcher has used the survey method for obtaining the data. The randomly selected sample consisted of 300 students from 12<sup>th</sup> standard in Tirunelveli District. The sample was stratified on the basis of sex, class, group, locality, nature of school, type of school. The tool used for data collection was examination anxiety scale which was constructed and validated by the investigator. Marks of the students in the quarterly examination were taken from the school records and treated as indicators of academic achievement. Mean, standard deviation, t-test, ANOVA, chi-square test, Pearson's product moment correlation were used for analysis of the data. The finding revealed that there is significant negative relationship between academic achievement and examination anxiety of 12<sup>th</sup> standard students.*

## INTRODUCTION

Examination anxiety is an excessive worry about upcoming exams, fear of and the apprehension about the consequences. It is an irrational thinking about exams and outcomes. It includes irrational beliefs, irrational demands and catastrophic predictions. As a result of examination anxiety, the child has no control over the exam situation. He shows a tendency to criticize himself and develops negative thinking. Mild anxiety or tension before an examination is helpful; but examination anxiety is felt when tension or nervousness around test time is so high that it has a negative effect on one's performance. Nearly everyone gets anxious about exams, and for most people some degree of anxiety is necessary and helpful. It allows them to concentrate well on difficult tasks for two or three hours at a time. However, many people who find they have done poorly in an exam wonder whether anxiety had a negative influence on their performance.

## SIGNIFICANCE OF THE STUDY

For all students whether brilliant or average if it comes to the question of facing examinations it evinces fear and mental conflict among them. This is because studying and writing examinations are not generally considered pleasant experiences. There is every chance for a student to fall a prey to the stress regarding taking up an examination unless proper counseling is given. Students as a whole are in the hands of anxiety, especially when it happens to be the students who are undergoing teacher training courses. As

our present examination system is very competitive, the students are expected to show a good performance in exams and more over for good placements the scores matter much. This makes the students more anxious about the examination. The students who are not able to cope up with anxiety may go worse and the achievement will be very low. This study is an attempt to find out the relationship between examination anxiety and academic achievement. Moreover such a study on 12<sup>th</sup> standard students is an untouched area. Hence the study is undertaken by the researcher.

## OBJECTIVES OF THE STUDY

1. To find out the level of examination anxiety and academic achievement of the 12<sup>th</sup> standard students.
2. To find out whether there is significant difference between boys and girls in their poor performance, self image, future security, preparation for test, bodily reactions, thought disruptions, general test anxiety and examination anxiety.

Rev. Dr. D. Thomas Alexander S.J.,  
Principal, St. Xavier's College of Education  
Palayamkottai.

J. Annapriya  
M.Phil Research Scholar  
St. Xavier's College of Education  
Palayamkottai.

Principal  
St. Xavier's College of Education  
(Autonomous)  
Palayamkottai-627002



3. To find out the significant difference among boys, girls and co-education school students in their poor performance, self image, future security, preparation for test, bodily reactions, thought disruptions, general test anxiety and examination anxiety.
4. To find out whether there is significant difference between boys and girls in their academic achievement.
5. To find out the relationship between examination anxiety and academic achievement of the 12<sup>th</sup> standard students.

### NULL HYPOTHESES

1. There is no significant difference between boys and girls in their poor performance, self image, future security, preparation for test, bodily reactions, thought disruptions, general test anxiety and examination anxiety.
2. There is no significant difference among boys, girls and co-education school students in their poor performance, self image, future security, preparation for test, bodily reactions, thought disruptions, general test anxiety and examination anxiety.
3. There is no significant difference between boys and girls in their academic achievement.
4. There is no significant relationship between the academic achievement of 12<sup>th</sup> standard students and their poor performance, self image, future security, preparation for test, bodily reactions, thought disruptions, general test anxiety and examination anxiety.

### METHODOLOGY

The investigator has adopted the survey method of research to find out the relationship between examination anxiety and academic achievement of 12<sup>th</sup> standard students. To accomplish this, proper methods of research sample and tools have to be selected.

### POPULATION FOR THE STUDY

The population for the study consisted of 12<sup>th</sup> standard students in Tirunelveli District, Tamilnadu.

### SAMPLE FOR THE STUDY

The investigator has randomly selected 300 students

from eight schools in Tirunelveli District for the present study.

### TOOLS FOR THE STUDY

For this study the investigator has constructed and validated a tool consisting of 50 items with 7 dimensions for finding out the examination anxiety level of the students.

### SOURCE FOR ACADEMIC ACHIEVEMENT

Marks of the students in the quarterly examination are taken from the school records and treated as indicators of academic achievement.

### STATISTICS USED

The investigator used the following statistical techniques for the study: mean, standard deviation, t-test, ANOVA, chi-square test and Pearson's product moment correlation.

### DATA ANALYSIS

**Table 1**  
**LEVEL OF EXAMINATION ANXIETY AND**  
**ACADEMIC ACHIEVEMENT OF 12<sup>TH</sup>**  
**STANDARD STUDENTS**

Dimensions	Low		Moderate		High	
	N	%	N	%	N	%
Poor performance	62	20.7	213	71	25	8.3
Self image	51	17	216	72	33	11
Future security	31	10.3	186	62	83	27.7
Preparation for test	52	17.3	205	68.3	43	14.4
Bodily reactions	48	16	224	74.7	28	9.3
Thought disruptions	45	15	195	65	60	20
General test anxiety	27	9	233	77.7	40	13.3
Examination anxiety	50	16.7	203	67.7	47	15.6
Academic achievement	65	21.7	192	64	43	14.3

It is inferred from the above table that 8.3% of the students have high level of poor performance, 11% of them have high level of self image, 27.7% of them have high level of future security, 14.3% of them have high level of preparation for test, 9.3% of them have high level of bodily reactions, 13.3% of them have high level of thought disruptions, 15.7% of them have high level of general test anxiety, 14.3% of them have high level of examination anxiety and 14.3% of them have high level of academic achievement.



Table 2

### DIFFERENCE BETWEEN MALE AND FEMALE STUDENTS IN THEIR EXAMINATION ANXIETY AND ITS DIMENSIONS

Dimensions	Male		Female (N=150)		Calculated 't' value	Remarks at 5% level
	Mean	SD	Mean	SD		
Poor performance	5.49	1.52	5.83	1.51	1.95	NS
Self image	3.71	1.45	3.95	1.36	1.52	NS
Future security	3.80	1.05	4.04	1.02	2.01	S
Preparation for test	3.79	1.48	4.11	1.37	1.94	NS
Bodily reactions	3.15	1.63	3.47	1.83	1.60	NS
Thought disruptions	6.29	1.94	6.90	1.78	2.86	S
General test anxiety	3.05	1.28	3.27	1.34	1.45	NS
Examination anxiety	29.32	5.80	31.69	6.62	3.30	S

(At 5% level of significance, the 't' value is 1.96)

It is inferred from the above table that, there is no significant difference between male and female students in their poor performance, self image, preparation for test, bodily reactions, and general test anxiety. But there is significant difference between male and female students in their future security, thought disruptions and examination anxiety.

Table 3

### DIFFERENCE AMONG BOYS, GIRLS AND CO-EDUCATION SCHOOL STUDENTS IN THEIR EXAMINATION ANXIETY AND ITS DIMENSIONS

Dimensions	Source of Variation	Sum of Squares	Degrees of freedom	Mean Square Variance	Calculated 'F' value	Remarks at 5% level
Poor performance	Between	39.61	2	19.8	8.97	S
	Within	656.03	297	2.21		
Self image	Between	9.77	2	4.89	2.46	NS
	Within	590.56	297	1.99		
Future security	Between	5.51	2	2.76	2.55	NS
	Within	320.57	297	1.08		
Preparation for test	Between	6.76	2	3.38	1.64	NS
	Within	610.59	297	2.06		
Bodily reactions	Between	18.26	2	18.26	6.22	S
	Within	2.94	297	2.94		
Thought disruptions	Between	16.66	2	16.66	4.8	S
	Within	3.47	297	3.47		
General test anxiety	Between	5.01	2	5.01	2.93	NS
	Within	1.71	297	1.71		
Examination anxiety as a whole	Between	362.47	2	362.47	9.51	S
	Within	38.12	297	38.12		

(At 5% level of significance, the table value of 'F' for (2,297) df is 3.03)

*Research Paper*

It is inferred from the above table that there is no significant difference among boys, girls, co-education school students in their self image, future security, preparation for test and general test anxiety. But there is significant difference among boys, girls, co-education school students in their poor performance, bodily reactions, thought disruptions and examination anxiety.

Table 4

### DIFFERENCE BETWEEN MALE AND FEMALE STUDENTS IN THEIR ACADEMIC ACHIEVEMENT

Variable	Male (N=150)		Female (N=150)		Calculated 't' value	Remarks at 5% level
	Mean	SD	Mean	SD		
Academic Achievement	56.75	16.55	59.91	14.30	1.77	NS

(At 5% level of significance, the table value is 1.96)

It is inferred from the above table that, there is no significant difference between male and female students in their academic achievement.

Table 5

### RELATIONSHIP BETWEEN EXAMINATION ANXIETY AND ACADEMIC ACHIEVEMENT OF 12<sup>TH</sup> STANDARD STUDENTS

Dimensions	Calculated 'g' Value	Remarks at 5% level
Poor performance	-0.164	S
Self image	-0.098	NS
Future security	-0.036	NS
Preparation for test	-0.154	S
Bodily reactions	-0.177	S
Thought disruptions	-0.074	NS
General test anxiety	-0.074	NS
Examination anxiety as a whole	-0.187	S

(The table 'g' value for N = 300 is 0.113)

It is inferred from the above table that there is no significant relationship between academic achievement and examination anxiety in self image, future security, thought disruptions and general test anxiety of the students. But there is significant negative relationship between poor



performance, preparation for test, bodily reactions and examination anxiety of the students.

## FINDINGS

8.3% of the 12<sup>th</sup> standard students have high level of poor performance, 11% of the students have good self image, 27.7% of the students have high level of future security, 14.3% of the students are good in preparation for test, 9.3% of the students have high level of bodily reactions, 20 % of the students have high level of thought disruptions, 13.3% of the students have high level of general test anxiety, 15.7% of the students have high level of examination anxiety and 14.3% of the students have high level of academic achievement.

There is no significant difference between male and female 12<sup>th</sup> standard students in their poor performance, self image, preparation for test, bodily reactions, and general test anxiety. But there is significant difference between male and female students in their future security, thought disruptions and examination anxiety. While comparing the mean score values of male and female students, the female students have more future security than the male students, while comparing the mean score values of male and female students, the female students have more Thought disruptions than the male students and While comparing the mean score values of male and female students, the female students have more examination anxiety than the male students. The "t" test reveals that female students have a high level of future security, thought disruptions and examination anxiety than male students. This may be due to the fact that the girls have the fear about their future and also female students are more anxious about the test results than their male counter parts.

There is no significant difference among boys, girls and co-education school 12<sup>th</sup> standard students in their self image, future security, preparation for test and general test anxiety. But there is significant difference among boys, girls and co-education school students in their poor performance, bodily reactions, thought disruptions and examination anxiety. While comparing the mean score values of boys, girls and co-education school students, the girls school

students have more poor performance than the boys and co-education school students. While comparing the mean score values of boys, girls and co-education school students, the girls school students have more bodily reactions than the boys and co-education school students. While comparing the mean score values of boys, girls and co-education school students, the girls school students have more thought disruptions than the boys and co-education school students and while comparing the mean score values of boys, girls and co-education school students, the girls school students have more examination anxiety than the boys and co-education school students. The "F" test reveals that girls school students have high level of poor performance, bodily reactions thought disruptions and examination anxiety than boys and co-education school students. This may be due to the fact that the girls incur more bodily reactions outwardly than boys. Girls are more susceptible to changes and lose emotional stability over difficult situations. This leads to poor performance in academic achievement.

There is no significant difference between male and female students in their academic achievement.

There is no significant relationship between academic achievement and examination anxiety in self image, future security, thought disruptions and general test anxiety of the students. But there is significant negative relationship between poor performance, preparation for test, bodily reactions and examination anxiety of the students. The correlation analysis reveals that there is significant negative relationship between poor performance, preparation for test, bodily reactions and examination anxiety of the students. This may be due to the fact that in an anxious situation, the student is not able to perform well. Further, the students forget even the well- learned concepts in such a situation. Hence this leads to have a negative impact on academic achievement.

## RECOMMENDATIONS

The students should be more focused, be self confident and advised to take breaks when they are worn out. They should be encouraged for indoor and outdoor activities,



family gatherings, TV watching and outings and also advised to be realistic and not to be discouraged. They should set realistic goals and be systematic and focused. It is helpful to make the student see what he or she can accomplish in the remaining time. Constant encouragement and reassurance is essential from all significant members in the school and family. It is important that the student is clear about how to take the examination, how to tackle questions and how to manage time. They should not demean themselves and should be properly advised to contact the teachers or counselors if they feel low or anxious or disinterested in studies.

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-Sarvepalli Radhakrishnan

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The true teachers are those who help us think for ourselves.-

Sarvepalli Radhakrishnan

When we think we know, we cease to learn

- Sarvepalli Radhakrishnan

## PARENTAL INVOLVEMENT...

### RECOMMENDATIONS

On the basis of the findings of this study the following recommendations were made by the investigator.

1. Every institution right from the primary school should be provided with facilities offering guidance and counseling. The psychologist and the counselor of the school can help the parents and students to develop involvement in the family and studies too.
2. Special programmes should be given to the students to develop interpersonal intelligence.
3. Innovative techniques should be adopted to create interest among the students to improve their social persuasion.
4. Special programs like quiz, science exhibition, cultural competitions and field trips should be conducted to develop parental involvement and interpersonal intelligence.
5. Seminars and symposiums should be conducted with the help of experts from different institutions.

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