

A Study of Impact of Anxiety on Scholastic Achievement of Student-teachers

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Abstract

The present study was undertaken to find out impact of Anxiety over student-teachers' Achievement. A survey was conducted on 480 student-teachers from various teachers training institutes situated at Bhopal affiliated to B.U. Bhopal through stratified random sampling technique. Comprehensive Anxiety Test developed by Dr R. L. Bhardwaj, Dr H. Sharma and Dr.M. Bhargava (2006 Hindi version) & for assessing the scholastic achievement PBIS prepared by researcher were used for data collection. Analysis by ANOVA, t-test (post-hoc), Correlation revealed that significant impact of Anxiety of student-teachers was found over their scholastic achievement.

Key Words – Anxiety, Scholastic Achievement, Student-Teachers,

Introduction

The study of the effect of anxiety on scholastic achievement has become a major topic of interest for educationists & psychologists. The ill effects of anxiety influenced all the areas of human activity. To every stimulus, the response given by each individual varies and so does the anxiety. The investigation done on the relationship between anxiety and academic achievement in field of educational psychology concludes it as a fact that anxiety might stimulates learning. In fact, anxiety might stimulate learning. The recent studies carried by psychologists shows that they are gradually getting aware of anxiety's role played in student's achievements. These researches further follows assessing anxiety's response. These researches have proven that every student pursuing their education at different stages might be affected by anxiety in the academic achievement. The researches conducted in recent times have a great support from the ancient times, considering Bugelski as a notable figure in the study of this field.

According to Bugelski, learning more than any other area of psychology needs a careful analytical examination of theories and the classification of issues. Attention is primary factor in any type of learning, it may result because of desire for reward, to escape punishment, curiosity etc. But basic to attention is anxiety. He considers that a teacher's task is to create the essential degree of anxiety. However its uneasy to answer that how much of anxiety is to be created. If it is more than the actual requirement, it would create a need to avoid the learning situation, which would eventually result in the lack of attention. Bugelski gives out the idea that by arousing student's curiosity, the anxiety is created as curiosity is a disguised form of anxiety. This concludes that a person's curiosity must be aroused and should be given initial task in which he is successful. The relationship between anxiety and achievement is according to time. Anxiety level usually increased preceding a terrifying situation and becomes relatively higher just before it is encountered; however anxiety gradually lowers while performing the situation as the individual must have concentration, as to perform successfully without being over shadowed by his developed fears. A number of theories are given concerning the effect of anxiety, where it is observed that maximum performance is reduced by too much anxiety.

Fear in a student affects his/her academic performance on a whole. The word fear mentioned refers to a rational appraisal of a real threatening situation and the term anxiety denotes an anomalous apprehension of such situation.

Need of the Study

The study conducted by Bugelski & recent scholars illuminates the subject like effects of anxiety on learning and achievements of students. However, the most recent times shows that there is a greater need in the present to study about how a student-teacher's achievements are influenced by their anxiety. It is observed that student-teachers' anxiety not only affects his behavior in the classroom and his social environment, as well as the scholastics achievement. Therefore present study attempts to investigate the relation between student- teacher's anxiety and their scholastic achievement.

The investigator herself being a teacher-educator, wanted to investigate the impact of anxiety of student-teachers over their academic achievement, which are to enter the teaching profession.

Purpose Of The Study

The purpose of the study is primarily to investigate the Impact of Anxiety on Scholastic Achievement of Student-teachers

Statement Of The Problem

“A Study of Impact of Anxiety on Scholastic Achievement of Student-teachers”

Oerational Definition

Anxiety: Anxiety is a painful uneasiness of mind concerning impending or anticipated ill.

Scholastic Achievement: Scholastic Achievement is the academic performance of a student in the class examination.

Student-teacher: A college student pursuing a degree in education who teaches in a classroom under the supervision of an experienced certified teacher. (www.thefreedictionary.com/student+teacher).

Review of Related Literature

Verma (1970) studied anxiety as a variable in perceptual reaction time, perceptual constriction and reproduction of simple and complex geometrical figures. Results showed that girls were found to be slow in comparison to boys. High anxiety group gave more unstructured responses whereas low anxiety subjects came out with more structured responses. High anxiety subjects displayed more perceptual constriction. In the reproduction of simple geometrical figures, low anxiety showed significantly better performance. **Singru (1972)** studied 62 students (21 girls and 41 boys) for their relationship between achievement motivation and test anxiety and found significant negative relationship between test anxiety and verbalized need achievement scores. **Asthana (2003)** worked on the problem solving as function of intelligence and anxiety and found that anxiety and intelligence both had their independent and interactive impact on anagram problem solving. Intelligence

facilitates the performance at high and low both levels of anxiety. **Mahajan and Sharma (2008)** revealed that the boys and girls do not show a significant difference in social anxiety as well. Girls were found to be more anxious about their marks and percentage as compared to the boys. **Tasnimi (2009)** found that anxiety is one of the affective factors which play an important role in learning and teaching process.

Objective of the Study

To find out the impact of Anxiety of student-teachers over their Scholastic Achievement

Hypotheses

- There is no significant impact of Anxiety of student-teachers on their Scholastic Achievement.
- There is no significant relationship between Anxiety and Scholastic Achievement of student-teachers.

Scope of the Study:

The scope of the present study pertains to the impact of anxiety on scholastic achievement of student-teachers who are studying in various B.Ed colleges of Bhopal District. Basis of data is response to the tools given to the student-teachers.

Delimitations of the Study

1. The study was confined to seven colleges of B.Ed in the Bhopal District, affiliated to B. U. Bhopal of Madhya Pradesh.
2. The sample was restricted to the student-teachers pursuing B.Ed. course.
3. The Sample size was restricted to 480 student-teachers only.

Methodology

Sample- Total 480 student-teachers are taken as sample from various teachers' training institutes situated at Bhopal district, affiliated to Barkatullah University M. P. through random sampling technique.

Tools- Tool used for data collection were Comprehensive Anxiety Test developed by Bharadwaj R.L., Sharma H., and Bhargava M. Hindi version (2006) and for assessing the achievement PBIS prepared by researcher .

Statistical Techniques- Mean score, S.D., ANOVA, t-test, scatter diagram, Pearson's Product moment coefficient 'r'.

Data Analysis & Interpretation

Objective: To find out the impact of anxiety of student-teachers over their achievement.

Hypothesis 1

There will be no significant impact of anxiety of student-teachers on their achievement. This hypothesis is verified by using the computed values of 't' test, ANOVA and their significance at 1% or 5% level is tested against null hypothesis. The hypothesis is verified and shown in the following table 1.

Table 1: Significance of 'F' for Anxiety in Respect of Achievement

Source	Df	Sum of squares	Mean square	F ratio	Sig
Between Groups	2	436.171	218.086		
Within Groups	477	26346.826	55.234	3.948*	0.020
Total	479	26782.998			

*significant at .05 level

The value of 'F' is found to be significant at 0.05 levels and hence the third hypothesis of present study is rejected. From this it may be said there is significant impact of anxiety of student-teachers on their achievement. This shows that the anxiety of student-teachers do influence on their achievement.

In order to know the significant impact of levels of anxiety in respect of student-teachers achievement, value of 't' are computed. Anxiety level wise distribution, mean and standard deviation in respect of student-teachers achievement is presented in table 4.9 and value of 't' is presented in table 4.10.

Table 2: Anxiety Level wise Distribution, Mean and Standard Deviation in respect of Student-teachers' Achievement

Anxiety levels	N	Mean	S.D.
High anxiety	26	52.23	5.256
Moderate anxiety	272	55.85	7.937
Low anxiety	182	56.59	6.887
Total	480	55.94	7.478

Table 3: Values of 't' between Different Levels of Anxiety of Student-teachers in respect of Achievement

Levels of Emotional maturity		't'	Significance
High anxiety	Moderate anxiety	-2.069*	0.047
	Low anxiety	-2.799*	0.015
Moderate anxiety	Low anxiety	-0.023	0.557 NS

*Significant at 0.05 level

NS- Not significant

The value of 't' (-2.069) is found to be significant at 0.05 level and hence hypothesis is rejected. This indicates that there is significant impact of high anxiety and moderate anxiety of

student-teachers on their achievement. When compared the mean scores, moderate anxious (55.85) student-teachers are greater in achievement than high anxious (52.23) student-teachers.

The value of 't' (-2.799) is found to be significant at 0.05 level and hence hypothesis is rejected. This indicates that there is significant impact of high anxiety and low anxiety of student-teachers on their achievement. When compared the mean scores, low anxious (56.59) student-teachers are greater in achievement than high anxious (52.23) student-teachers.

The value of 't' (-0.023) is found to be not significant and hence the hypothesis is not rejected this shows that there is no significant impact of moderate and low anxiety on achievement of student-teachers, it means no significant difference was found.

On the whole the results pertaining to anxiety and achievement of student-teachers reveal that there is significant impact of anxiety of student-teachers on their achievement. There is significant difference between all the three levels of anxiety in respect of achievement of student-teachers. But moderate and low anxiety does not differ significantly in respect of student-teachers achievement. From the testing of hypothesis it is concluded that moderate anxious student-teachers are greater in achievement than that of the low and high anxious student-teachers. In other words student-teachers with moderate anxiety are significantly higher in their achievement than those with low and high anxious student-teachers. This shows that the anxiety of student-teachers do influence on their achievement.

The above findings support the findings of the earlier research studies. **Sarason (1960)** found that test-anxiety scores were correlated with academic achievement. **Gupta (1978)** observed that the low anxiety group had higher mean achievement motivation than the high anxiety group but the differences were not statistically significant. **Thilagavathi (1990)** found negative influence of anxiety on achievement. **Gautam P. and Swati (2008)** reported that the test anxiety affects academic achievement significantly and is negatively correlated. These findings are in conformity with the present study findings.

Hypothesis 2. There will be no significant relationship between anxiety and achievement of student-teachers.

There is hypothesis 2 pertaining to relationship between anxiety and achievement of student-teachers. This hypothesis is verified using the computed value of 'r' by Pearson's product-moment method and scatter diagram plotted between Anxiety & Achievement. The correlation between anxiety and achievement is calculated for verification of the hypothesis is presented in tables 4.

Anxiety and achievement

Table 4: Significance of 'r' between Anxiety and Achievement of Student-teachers

Variables	N	df	'r'	Significance
Anxiety and Achievement	480	478	-0.090*	0.048

*Significant at 0.05 level

Table 4 reveals that the coefficient of correlation between anxiety and achievement of student-teachers (N=480) found to be -0.090 (negligible degree) which is significant at 0.05 level and hence the sixth hypothesis is rejected. From this it may be said there is negative relationship between anxiety and achievement of student-teachers.

The negative nature of relationship shows that the anxiety might negatively affect the student-teachers' achievement. If frequency of anxiety is high, then the achievement of student-teachers will be decreased and if the frequency of anxiety is low, then the achievement of student-teachers will be increased.

This indicates that the student-teachers, who are low anxious having greater achievement and the student-teachers, with high anxiety are poor in their achievements. Scatter diagram between anxiety and achievement is shown more under Figure .

Anxiety and Achievement

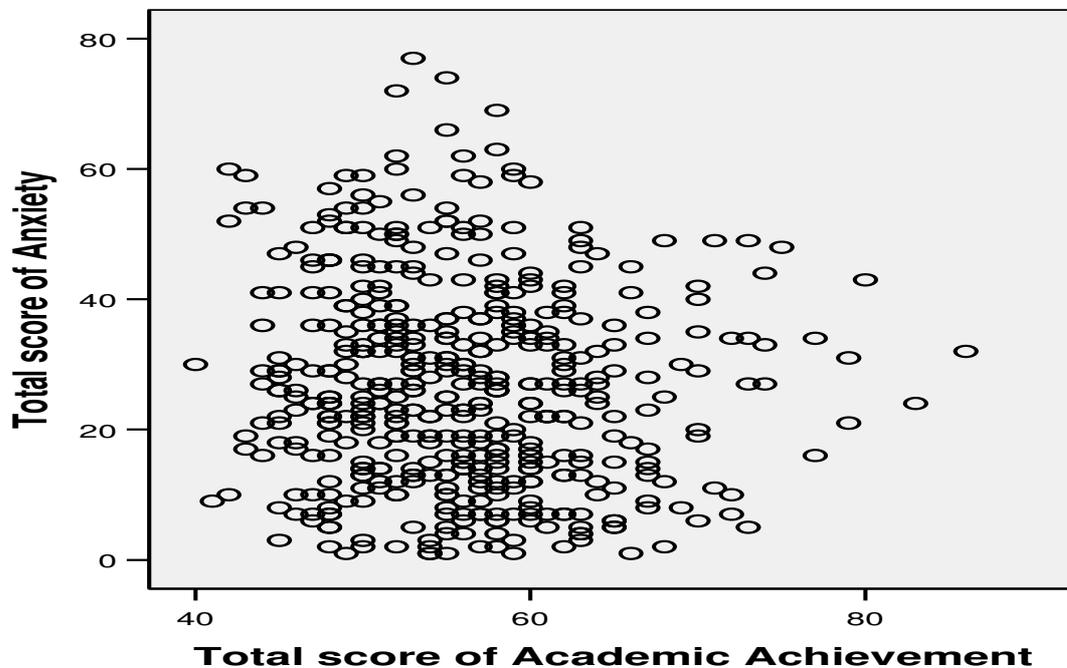


Figure : Scatter Diagram between Anxiety and Achievement

On the whole, the result pertaining to relation between anxiety and achievement indicates that, there is negative relationship between anxiety and achievement of student-teachers. The student-teachers, with less anxiety have greater achievement in comparison to those with higher anxiety levels

The above findings support the findings of the earlier research studies. Sarason (1960) found that test-anxiety scores were correlated with academic achievement. Gupta (1978) observed that the low anxiety group had higher mean achievement motivation than the high anxiety group but the differences were not statistically significant. Thilagavathi (1990) found negative influence of anxiety on achievement. Gautam P. and Swati (2008) reported that the test anxiety affects academic achievement significantly and is negatively correlated. Verma (1970) showed that high anxiety group gave more unstructured responses whereas subjects with lower anxiety levels came out with more structured responses. Subjects with higher anxiety levels displayed more perceptual constriction. In

the reconstruction of the geometrical figures, lower anxiety subjects showed significantly better performance. These findings are in conformity with the present study findings. But Ajwani and Sharma (2004) found that high academic achiever would show greater anxiety as compared to low academic achievers, which is contrary with the present findings but in the similar field.

Finding & Discussion

There is significant impact of anxiety of student-teachers on their achievement. There is significant difference between all the three levels of anxiety in respect of achievement of student-teachers. But it is also observed that moderate and low anxiety does not differ significantly in respect of student-teachers achievement. It is concluded that low anxious student-teachers are greater in achievement than that of the moderate and high anxious student-teachers. In other words student-teachers with low anxiety are significantly higher in their achievement than those with high and moderate anxious student-teachers. This concluded that the anxiety of student-teachers do influence on their achievement.

As regards the relation between anxiety and achievement it is observed that there is negative relationship between anxiety and achievement of student-teachers. The student-teachers, who are low anxious having greater achievement and the student-teachers, with high anxiety are poor in their achievements.

Conclusion

There is significant impact of anxiety of student-teachers on their achievement. But it is also observed that moderate and low anxiety does not differ significantly in respect of student-teachers achievement. It is concluded that low anxious student-teachers are greater in achievement than that of the moderate and high anxious student-teachers.

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