

## **STUDY OF ACADEMIC ANXIETY AND ACADEMIC ACHIEVEMENT AMONG SECONDARY SCHOOL STUDENTS**

**Md Aman Azeem**\*

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### **Abstract**

The role of academic anxiety cannot be underestimated among the predictors of academic achievement. Anxiety is an excited state of nervous system as a result of which sense of tension, nervousness and worry is being inflicted on individual (Spielberger,1983). In the modern time it is considered as a major predictor of academic performance (Mc Craty, 2007 and Mc Craty, et al., 2000). Reason being clear that world has become a place of great unnatural competition and academic achievements are seen as a bench mark of success in one's life. Sample of 340 secondary school students from various schools of Aligarh were selected for the study. A standardised tool was used to collect the anxiety scores and CGP of the students in their previous classes, obtained from school records were taken as an index of their academic achievement. Later CGP was converted in to percentage marks. Present study is planned to find out difference as well as relationship in between the academic anxiety and academic achievement with respect to gender and religion respectively. Results of this study clearly revealed that, no significant difference is found in the academic anxiety and academic achievement of male and female students respectively. Similarly, no significant difference is found in the academic anxiety and academic achievement of muslim and non-muslim students respectively. Though, a significant and negative relationship is seen among the academic anxiety and the academic achievement. It is also inferred from the findings that a moderate level of anxiety is desired in order to excel in the academics, and when anxiety crosses the limit academic achievement decreases significantly.

**Key words: academic anxiety, academic achievement, muslims and non-muslims**

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\* **Research Scholar, Department of Education, Aligarh Muslim University, Aligarh U.P.(INDIA)**

## **Introduction**

World has become a place of great unnatural competition and academic achievements are seen as a bench of success in student's life. In all stages of education system i.e. from nursery to higher education, academic achievement is of great preponderant and maximum emphasis is given to it. Carter in 1969 defined "academic achievement as the knowledge attained or skill developed in school subjects usually determined by test scores or marks assigned by the teacher". In order to achieve greater success, students have to taste this cut-throat contention, which in turn makes them anxious, worried and sometimes poor performer too. Students with high levels of anxiety show passive attitude towards studies, lack of concentration and confidence, reduced memory span and poor reasoning abilities (Aronen et al., 2005). These psychological symptoms ultimately affect the potential to achieve good grades and significantly interferes with the daily routine of the student too. Anxiety is an excited state of nervous system as a result of which sense of tension, nervousness and worry is being inflicted on individual (Spielberger, 1983). Moreover, it is a major predictor of academic performance (McCraty, 2007 and McCraty, et al., 2000). In general anxiety is of two types i.e. trait anxiety and state anxiety. Trait anxiety is a stable and general characteristic of an individual whereas state anxiety is specific, aroused by some kind of contemporary situations and environment with which individual is dealing (Bihari, 2014). Academic anxiety is a sort of state anxiety which relates to the approaching threat from the academic institution's environment admitting teachers, certain subjects like Mathematics, English etc (Meetai, 2012). Academic anxiety may become detrimental, obstacle in the academic performance over the period of time. As the academic performance of the student suffers, the levels of anxiety related to certain academic chore also increases (Huberty, 2009). Though an acceptable level of academic anxiety is actually a good thing as it keeps the student motivated to accomplish the academic tasks given to them (Neelam, 2013).

## **Review of related literature**

Review of related literature familiarizes the researcher with current knowledge regarding the study under investigation. It reduces the risk of duplication. It helps the researcher in defining the scope and limits of the problem as well as the nature of variables and field of research. It assures the researcher that problem under investigation has its roots in existing literature and it needs

further investigation. It keeps the researcher up to date on the findings of the researches that have already been done. It acquaints the researcher with rich background knowledge regarding the relationships among the variables and the findings of other research related to the problem under investigation.

Some of the studies related to academic anxiety and academic achievement are as follows:

**Rehman (2016)** carried out a study to find out the causes of academic anxiety among higher education students and its preventive measures. Findings of the study clearly revealed that there are various potential threats such as personal, familial, institutional, social and political that provoke the anxiety among students and clinical and non-clinical measures are available to deal with the anxiety. There is a dire need to spread awareness among the students, parents, teachers.

**Yusuph (2016)** investigated the causes and effect of anxiety on the academic performance of secondary students of Domodo, Tanzania. Results revealed that the major cause of anxiety among students was corporal punishment followed by school milieu and potentials (capabilities) of the students, and significant number of the students are affected by it. Moreover, there was an inverse relationship in between anxiety and academic performance. Girls were more prone to anxiety as compared to boys.

**Banga(2016)** carried out a study to find out the levels of anxiety among 400 senior secondary boys and girls of Himachal Pradesh. Findings of the study clearly showed that significant difference existed in the levels of anxiety between boys and girls, Girls were more prone to anxiety than that of boys.

**Mahajan (2015)** revealed in their study that no significant difference existed in the academic anxiety of male and female secondary school students moreover a significant difference is found in the academic anxiety of government and private secondary students. He also reported that academic stress was significantly and negatively correlated to parental encouragement.

**Singh(2015)** conducted a study on the impact of anxiety on academic achievement and found that moderate and low levels of anxiety among students was positively correlated with the

academic achievement. High level of anxiety was negatively correlated. Female students showed higher level of anxiety as compared to the male students.

**Shakir (2014)** made a correlational study between academic anxiety and academic achievement on the basis of gender. Findings clearly showed a negative relationship between academic anxiety and achievement. Gender also affects the anxiety, females were more anxious than male.

**Kumar & Kumar (2014)** investigated the relationship between academic anxiety and academic achievement, in their study on senior secondary students and reported a negative and significant relationship between anxiety and academic achievement. Moreover, it was also reported that girls were more affected by anxiety than boys.

**Neelam (2013)** conducted study on academic achievement of Secondary school students having differential levels of Academic anxiety and reported that academic achievement is inversely related to academic anxiety i.e. those students who had high level of anxiety showed poor academic achievement moreover girls were better in academic achievement and showed high degree of anxiety than boys.

**Mokashi, Yadav, Khadi (2012)** examined the gender difference on anxiety and academic achievement of 330 residential high school students in their study and reported that a significant difference found between boys and girls on anxiety making the boys more anxious than girls. Gender significantly contributes to academic achievement; girls were more achievers than boys. Over all a negative relationship was observed between anxiety and academic achievement.

**Mohato & Jangir (2012)** made a comparative study of academic anxiety and effect of school environment on anxiety among adolescents of Minicoy Island. Results revealed that majority of the students experienced the taste of anxiety. Gender does not affect the anxiety. Types of school and the facilities in them does affect the anxiety. It was also reported that government school students are more anxious than private school students.

Above mentioned studies are related to the academic anxiety and its effect on the academic achievement, there are ample number of researches carried out to establish the effect of academic

anxiety on the academic achievement of secondary and higher secondary school level. Unfortunately, there are very few studies conducted on the muslims and non-muslims of Aligarh district of Uttar Pradesh. So, this study is humble attempt to bridge the existing gap.

### **Significance of the study**

Contemporary era is an era of advancement and modernisation, every aspect of life is changing at a great pace, so do our education system. Due to this agile change, there is un-natural competition among individuals. If anyone wants to be in the system as a best fit he/she has to counter the contention. Students are also greatly influenced by the contemporary system as they have to show high level of achievement, which is an indicator of the academic success. Students are burdened with great desire of performance pressure, that leaves them in a great lurch very often, make them anxious, sick and if prolonged may affect their overall personality. Hence keeping the effect of present scenario in the mind the researcher felt an urgent need to conduct this study related to academic anxiety and academic achievement.

### **Objectives of the study**

- To find out the levels of academic anxiety among secondary school students.
- To calculate the differences if any, in academic anxiety on the basis of gender.
- To find out the differences if any, in the academic anxiety on the basis of religion.
- To figure out the differences in academic achievement of male and female students.
- To find out the differences in academic achievement on the basis of religion.
- To find out the relationship between academic anxiety and academic achievement.

### **Hypotheses of the study**

- There will be no difference in academic anxiety of male and female students.
- There will be no difference in academic anxiety of muslim and non-muslim students.
- There will be no difference in the academic achievement of male and female students.
- There will be no difference in the academic achievement of muslim and non-muslim students
- There will be no relationship between academic anxiety and academic achievement of secondary students.

## Methodology

This study falls under the category of descriptive research. A standardised tool was used to collect the data, thus, a survey research design was adopted in order to carry out the further study.

## Sample

In order to carry out the present study researcher selected a sample of 400 Secondary School students studying in various schools of Aligarh city (Uttar Pradesh, India). In the final sorting only 340 were selected out of 400, as 60 responded did not fill the questionnaire completely hence they were rejected.

**Table 1**

### SHOWING TOTAL SAMPLE AND ITS DISTRIBUTION

Total sample	Gender		Religion	
	Male	Female	Muslim	Non-muslim
340	201	139	204	136

## Research tool used

A Standardised Academic Anxiety Scale (AAS) developed by Siddiqui, M.A. & Rehman, A. (2017) was administered and information regarding academic anxiety were collected. Tool comprised of 44 items measuring six different dimensions of the academic anxiety and is also having concurrent validity and reliability of 0.85. Marks obtained by the secondary students in their previous class obtained from school records were taken as an index of their academic achievement.

## Statistical technique used

The data were analysed with the use of suitable statistical measure to meet the objectives of the study.

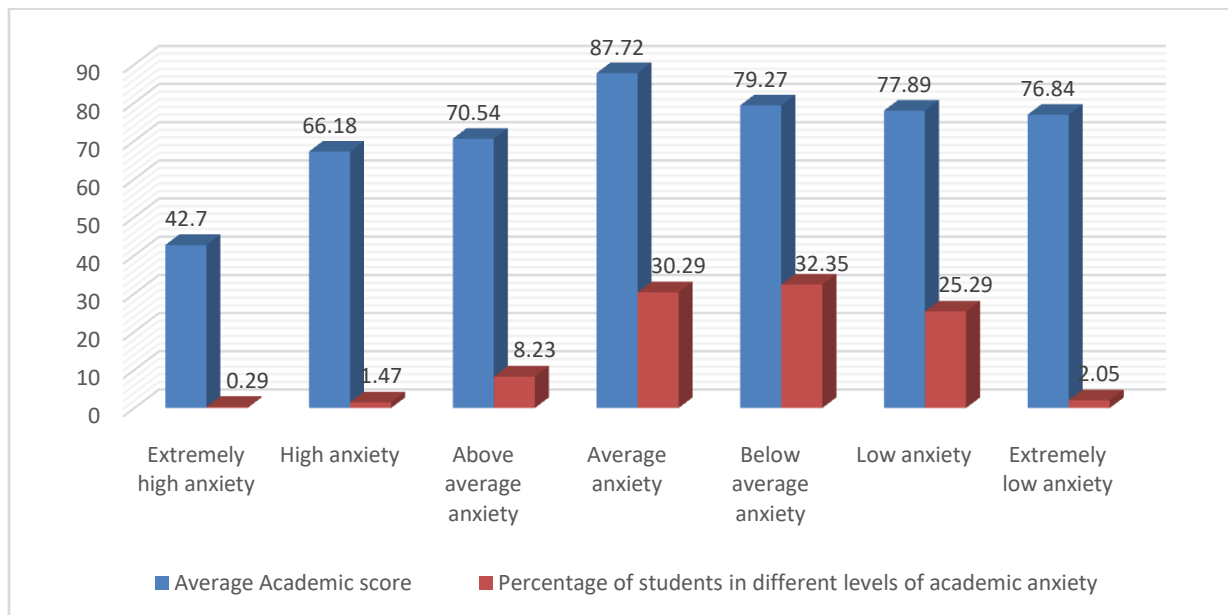
## Data analysis and interpretation

### Objective 1

#### Table 2

### SHOWING LEVELS OF ACADEMIC ANXIETY

Levels of academic anxiety	N	Percentage%	Average Academic score
1(Extremely high anxiety)	1	0.29	42.7
2 (High anxiety)	5	1.47	66.18
3 (Above average anxiety)	28	8.23	70.54
4 (Average anxiety)	103	30.29	87.72
5 (Below average anxiety)	110	32.35	79.27
6 (Low anxiety)	86	25.29	77.89
7 (Extremely low anxiety)	7	2.05	76.84
<b>Total</b>	<b>340</b>	<b>100</b>	<b>71.59</b>



**H<sub>01</sub>:** There will be no difference in academic anxiety of male and female students.

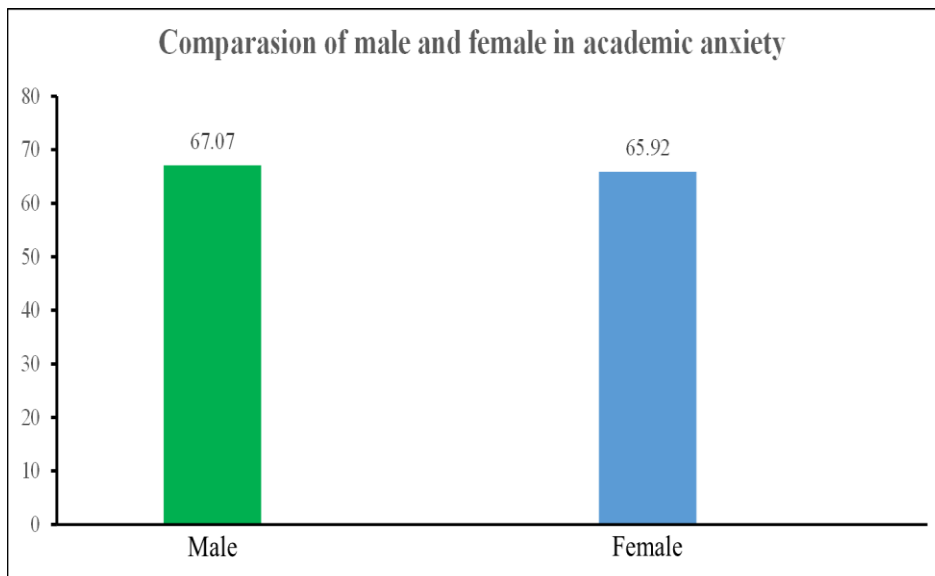
To verify the hypothesis the mean score of academic anxiety of male and female students were compared by using t-test. The results were analysed and presented in the table below.

**Table3****SHOWING DIFFERENCE IN ACADEMIC ANXIETY IN TERMS OF GENDER**

Gender	N	Mean	S.D.	df	t-value	Level of significance	Null hypothesis A/R
Male	201	67.07	12.20	338	0.903	0.05	Accepted
Female	139	65.92	10.53				

**Interpretation**

As shown in the table 3, it has been noticed that at 338 degrees of freedom tabulated 't' value at 0.05 of significance is 1.97. The actual t-value is 0.903 which is greater than the tabulated value, therefore it is inferred that there is no significant difference in the academic anxiety of male and female. Since the calculated t-value is lesser than the tabulated t-value, so the null hypothesis is accepted.



**Ho2:** There will be no difference in academic anxiety of muslim and non-muslim students.

To verify the hypothesis the mean score of academic anxiety of muslim and non-muslim students were compared by using t-test. The results were analysed and presented in the table below.

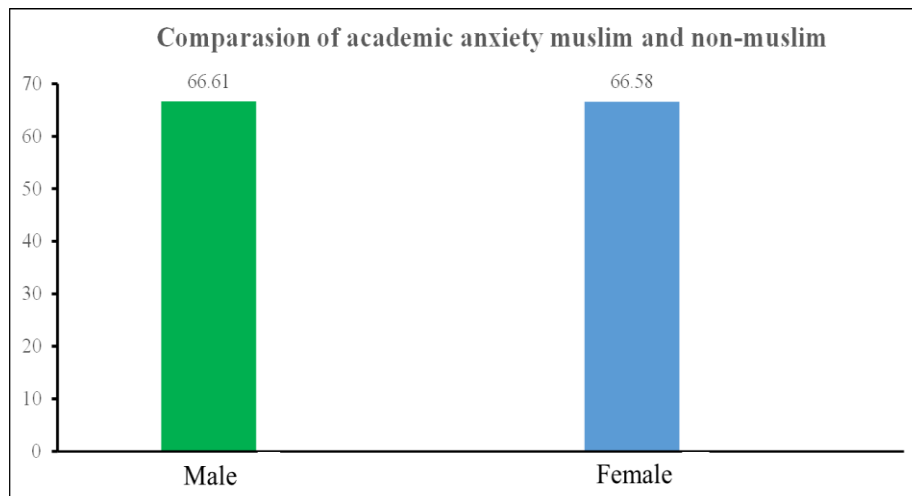


**Table 4****SHOWING DIFFERENCE IN ACADEMIC ANXIETY IN TERMS OF RELIGION**

Religion	N	Mean	SD	df	t-value	Level of significance	Null hypothesis A/R
Muslim	204	66.61	11.11	339	.027	0.05	Accepted
Non-Muslim	136	66.58	12.21				

**Interpretation**

As shown in the table 4, it has been noticed that at 339 degrees of freedom tabulated 't' value at 0.05 of significance is 1.97. The actual t-value is 0.027 which is greater than the tabulated value, therefore it is inferred that there is no significant difference in the academic anxiety of muslim and non-muslim students. Since the calculated t-value is lesser than the tabulated t-value, so the null hypothesis is accepted.



**H<sub>03</sub>:** There will be no difference in academic achievement of male and female students.

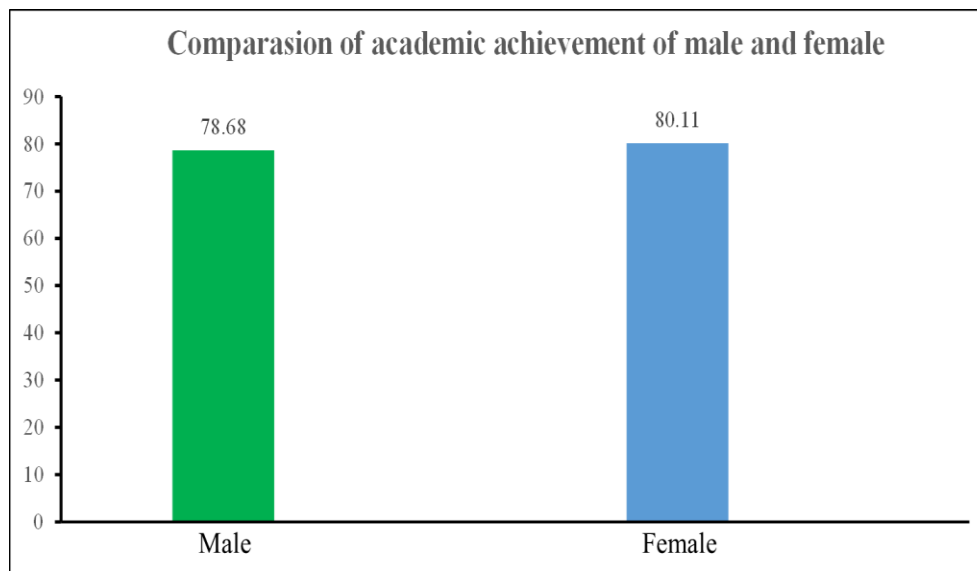
To verify the hypothesis the mean score of academic achievement of male and female students were compared by using t-test. The results were analysed and presented in the lower table.

**Table 5****SHOWING DIFFERENCES IN ACADEMIC ACHIEVEMENT IN TERMS OF GENDER**

Gender	N	Mean	SD	df	t-value	Level of significance	Null hypothesis A/R
Male	201	78.68	13.31	339	-.965	0.05	Accepted
Female	139	80.11	13.51				

**Interpretation**

As shown in the table 5, it has been noticed that at 339 degrees of freedom tabulated 't' value at 0.05 of significance is 1.97. The actual t-value is -.965 which is greater than the tabulated value, therefore it is inferred that there is no significant difference in the academic achievement of male and female. Since the calculated t-value is lesser than the tabulated t-value, so the null hypothesis is accepted.



**Ho4:** There will be no difference in academic achievement of muslim and non-muslim students.

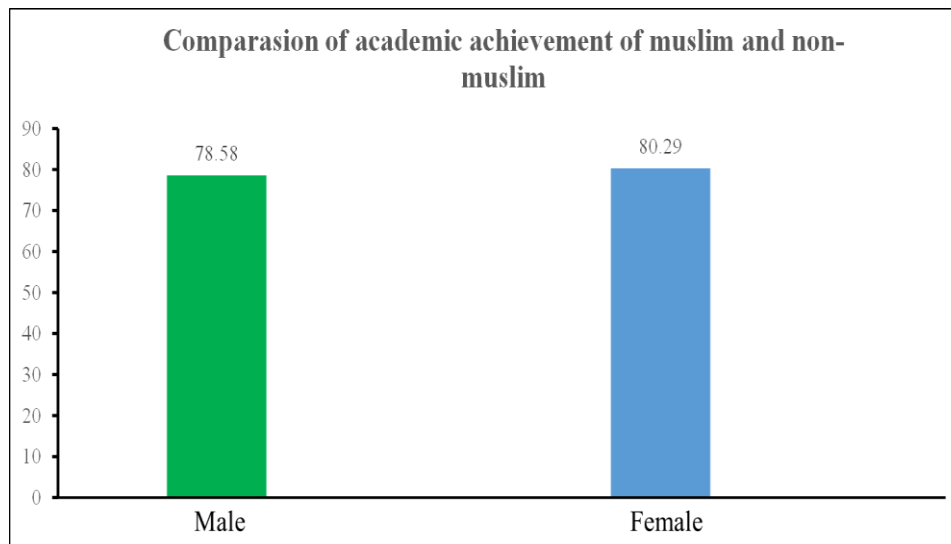
To verify the hypothesis the mean score of academic achievement of muslim and non-muslim students were compared by using t-test. The results were analysed and presented in the table below.

**Table 6****SHOWING DIFFERENCE IN ACADEMIC ACHIEVEMENT IN TERMS OF RELIGION**

Religion	N	Mean	SD	df	t-value	Level of significance	Null hypothesis A/R
Muslim	204	78.58	12.87	339	-1.15	0.05	Accepted
Non-muslim	136	80.29	14.13				

**Interpretation**

As shown in the table 6, it has been noticed that at 338 degrees of freedom tabulated 't' value at 0.05 of significance is 1.97. The actual t-value is -1.15 which is greater than the tabulated value, therefore it is inferred that there is no significant difference in the academic achievement of muslim and non-muslim students. Since the calculated t-value is lesser than the tabulated t-value, so the null hypothesis is accepted.



**Ho5:** There will be no relationship between academic anxiety and the academic achievement.

To verify the hypothesis Pearson correlation was used and the results were analysed and presented in the table below.

**Table 7**  
**RELATIONSHIP BETWEEN ACADEMIC ANXIETY AND ACADEMIC ACHIEVEMENT.**

Correlations			
Variables	Correlation method	Anxiety score	Academic Achievement
Anxiety score	Pearson Correlation	1	-.328**
	Sig. (2-tailed)		.000
	N	340	340
Academic Score	Pearson Correlation	-.328**	1
	Sig. (2-tailed)	.000	
	N	340	340

\*\* Correlation is significant at the 0.01 level (2-tailed).

### Interpretation

As shown in the table 7, it has been noticed that at 0.01 level of significance the value of correction is -.328. Therefore it is inferred that there is a significant negative correlation between academic anxiety and academic achievement. This also shows that a moderate level of anxiety is essential in order to achieve good grades. When this moderate level crosses the limit academic achievement decreases.

### Findings of the study

1. Out of 340 students selected for the study

- 32.35% (110) were of **Below average anxiety** level
- 30.29% (103) were of **Average anxiety** level
- 25.29% (86) were of **Low anxiety** level
- 8.23% (28) were of **Above average anxiety** level
- 2.05% (7) were of **Extremely low anxiety** level
- 1.47% (5) were of **High anxiety** level
- 0.29% (1) were of **Extremely high anxiety** level

2. No significant difference is found in the academic anxiety of male and female students.

3. No significant difference is found in the academic anxiety of muslim and non-muslim students.

4. No significant difference is found in the academic achievement of male and female students.
5. No significant difference is found in the academic achievement of muslim and non-muslim students.
6. There is a significant negative correlation between the academic anxiety and academic achievement.

### **Conclusion and Discussion**

Anxiety is a common phenomenon of today's life style. It significantly affects the human life, we all are the victim of anxiety in various ways (Lenka& Kant, 2012). There are various researches which say that anxiety is not always a bad thing. In the absence of academic anxiety majority of us would lose the motivation to achieve success in the life. Moderate level of anxiety is essential in life particularly when it comes to academics, anxiety not only motivates the student but also propels them to work hard, achieve good grades and also to accomplish other works that are crucial in life. When anxiety crosses the plimsol mark then it becomes a sign of danger. If prolonged, not only overall personality overall body physiology is affected too, making the person maladjusted, anxious, timid, disease prone, non-healthy. In several cases concentration span and memory is adversely affected. Hence academic anxiety should not be ignored at any cost (Shakir, 2013). In the present study, no difference is found in the academic anxiety and academic achievement on the basis of gender and religion. The possible reason behind the no difference is that in Aligarh is a city of educational institution of higher learning, having congenial atmosphere for learning. Guidance and counselling programmes are readily available in schools from where the data is collected. Here girls are treated equally to that of boys and the gender gap is nil. Both are having equal educational opportunities. People are more aware about the importance of education. Good and effective schools are here that provides quality education irrespective of the caste, creed and gender. Increased level of anxiety is a detrimental factor that slow downs or blocks the potential to achieve good grades, hence in order to curb the anxiety counselling programmes should be organised for students, teachers and parents. Teachers and parents should be made more aware about the damaging effect of it. Motivational lectures should also be given to the students, so that they can get motivation and could deal effectively with the anxiety.

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