



# Anxiety and Study skills in Underachievers among High School Students

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## ABSTRACT

From the MHI Girls' High School, Akraharam, Erode, Tamil Nadu, 300 students from VII, VIII and IX were screened for underachievement on the basis of their Half Early Examination marks. Based on the marks, sixty underachievers were identified. Case Study Schedule, Manifest Anxiety Inventory and Study Skill Questionnaire were administered on the sample. Intervention involving Relaxation Training and Study Skills Training were given to the sample for 5 sessions continuously. Each session consisted of 20 minutes of Relaxation Training and 1 hour of Study Skills Training. The subjects were instructed to follow Relaxation Training and Study Skills Training for 3 weeks. After 3 weeks, the subjects were reassessed using the Manifest Anxiety Questionnaire and Study Skills Questionnaire. The marks scored by the sample in the following Third Monthly Test were also recorded to note the improvement after the intervention. The results of the study revealed that before intervention, half of the sample had very high anxiety. The difference in mean anxiety before and after intervention was statistically significant at 0.01 levels. Before Study Skills Training, the entire sample had unsatisfactory study skills. The difference in mean study skills before and after intervention was statistically significant at 0.01 level. There was a negative correlation between anxiety and study skills in the sample. There was a positive correlation between study skills and academic performance and negative correlation between anxiety and academic performance in the sample. The correlations were significant 0.01 levels.

**Key words:** Anxiety, underachievement, study skills training, high school students.

## Introduction

Anxiety is a general term for several disorders that cause nervousness, fear, apprehension, and worrying. These disorders affect how we feel and behave, and they can manifest real physical symptoms. Mild anxiety is vague and unsettling, while severe anxiety can be extremely debilitating, having a serious impact on daily life. People often experience a general state of worry or fear before confronting something challenging such as a test, examination, recital, or interview. These feelings are easily justified and considered normal. Anxiety is considered a problem when symptoms interfere with a person's ability to sleep or otherwise function. Generally speaking, anxiety occurs when a reaction is out of proportion with what might be normally expected in a situation (Medi Lexicon International Ltd, 2012).

According to Jacobs and Jacobs (2004) anxiety is defined as "Characterized by an overwhelming sense of apprehension; the expectation that something bad is happening or will happen; class of mental disorders characterized by chronic and debilitating anxiety (e.g. generalized anxiety disorder, panic disorder, phobias, and post-traumatic stress disorder).

There is no one cause for anxiety. Genetics alone can't cause anxiety, because within one family you may have a child who seems to be born anxious, while his or her sibling could use a little more caution because they seem to be fearless. Exposure to a stressful environment can be a pathway to developing anxiety, but even with exposure to a traumatic event, only about 1/4 of all children develops a post-traumatic

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stress disorder. It is best to understand the causes of anxiety as resulting from a combination of an increased vulnerability to anxiety-- because of genetic or physiological makeup and exposure to a specific trauma or acute or ongoing stressor (worrywisekids.org 2009). The reasons for failure to achieve one's promise prohibit answers in terms of statistics or percentages those are complex and elusive. Over the years studies have been done tapping at the source of failure through the channel of sociology, psychology, physiology and genetics. Underachievers may be classified into two broad groups:

- (a) The first group includes those who are more withdrawn, passive individuals who never reach their potential;
- (b) The second group includes hyperactive and aggressive children who disrupt classes and annoy their teachers (Maitra, 1991).

Although education is not the only road to success in the working world, much effort is made to identify, evaluate, track and encourage the progress of students in schools. Parents care about their child's academic performance because they believe good academic results will provide more career choices and job security. The tracking of academic performance fulfils a number of purposes. Areas of achievement and failure in a student's academic career need to be evaluated in order to foster improvement and make full use of the learning process. Results provide a framework for talking about how students fare in school, and a constant standard to which all students are held. Performance results also allow students to be ranked and sorted on a scale that is numerically obvious, minimizing complaints by holding teachers and schools accountable for the components of each and every grade.

The teenage years can be an emotional assault course for all concerned. A gulf can grow between parents and their children during adolescence. One of the reasons many of us find it so hard is because it is a time of rapid physical development and deep emotional changes. These are exciting, but can also be confusing and uncomfortable for child and parent alike. Emotional problems will often affect school work - worrying about oneself or about what is going on at home makes it difficult to concentrate. Pressure to do well and to pass exams may come from parents or teachers, but adolescents usually want to do well and will push themselves. Excessive nagging can be counter-productive. Exams are important, but they should not be allowed to dominate life or to cause unhappiness. It has been found that adolescents studying in the government schools in South India perform poorly in their academics due to incompetent teaching by the teachers and lack of

parental motivation. The above condition could be partly attributed to the lower socio economic status of the students. A genuine attempt was made by the researcher to identify a group of underachievers from a government school and help them manage their anxiety and improve their academic performance by employing a combination of Relaxation Training and Study Skills Training.

### Objectives of the study are

- To assess the level of anxiety in the selected underachievers
- To ascertain the effect of Relaxation Training on the level of anxiety of the sample
- To assess the Study Skills of the sample
- To find out the effect of Study Skills Training on the academic achievement of the sample

### Sample

From MHI Girl's High School, Akraharam, Erode, Tamil Nadu, sixty underachieving high school students in the age range of 12-14 years, were selected to serve as the sample.

### Tools

- Case Study Schedule ( 2012)
- Manifest Anxiety Inventory (Nandini Menon and Hemalatha Natesan, 2005)
- Study Skills Questionnaire (Kanchana, 1986)

Case Study Schedule was used to collect the personal information and information regarding demographic factors of the sample. Manifest Anxiety Inventory consisted of 40 questions. The subjects were asked to go through each question carefully and answer by marking a tick ( ) Yes/No options. The scoring was done using the scoring key and the results were interpreted according to the norms provided by the authors.

Study Skills Questionnaire was used to measure the level of study skills in underachievers among high school students. It consisted of 52 questions. The subjects were asked to read each question carefully and give their responses by marking ( ) on Yes/No options. The scoring was done by referring to the scoring key. The results were interpreted according to the norms provided by the author.

### Methodology

From the MHI Girls' High School, Akraharam, Erode, Tamil Nadu, three hundred students from VII, VIII and IX were screened for underachievement on the basis of their Half Early Examination marks. Based on





the marks, sixty underachievers were identified. Case Study Schedule, Manifest Anxiety Inventory and Study Skill Questionnaire were administered on the sample. Then Relaxation Training (Hemalatha Natesan, 2004) and Study Skills Training were given to the sample for 5 sessions continuously. Each session consisted of 20 minutes of Relaxation Training and 1 hour of Study Skills Training. The subjects were instructed to follow Relaxation Training and Study Skills Training for 3 weeks. After 3 weeks, the subjects were reassessed using the MAI and Study Skills Questionnaire. The marks scored by the sample in the following Third Monthly Test were also recorded to note the improvement after the intervention.

## Intervention

### Relaxation Training

In Relaxation Training, the participants were asked to lie down flat on a mat or a cot (without pillow) with the head straight, lips slightly apart, hands comfortably placed on the sides, palms facing upwards and legs stretched, with feet, one foot apart. The participants were asked to close the eyes and have a folded handkerchief placed on the eyes to ensure complete darkness (The nose should not be covered). Instructions were given to breathe in and breathe out in a slow manner relaxing each and every part of the body from head to foot. Once the whole body was relaxed, affirmations such as 'Inhale GOOD HEALTH. Breathe out all the aches, pains and sicknesses from the body' were called out.

### Study Skills Training

Study Skills Training involved the following steps:

- Self-monitoring
- Time management
- Goal setting
- Mnemonics
- Concentration and memory techniques
- Encouragement and guidance from teachers and parents

### Experimental Design

The experimental design used in this research was 'Before and After Intervention without Control Design'. A single test group without control group was used in this study. The dependent variables 'Anxiety' and 'Study Skills' were measured both before and after intervention, the independent variable.

	Time Period I	Treatment	Time Period II
Test Area	Level of phenomenon before intervention Anxiety (A) Study Skills (C)	Intervention	Level of phenomenon after intervention Anxiety (B) Study Skills (D)

1. Treatment effect = B-A

2. Treatment effect = D-C

## Results and Discussion

The data showed that almost half (47%) of the sample belonged to low income group. Only 31% belonged to high income group and the rest of the sample (22%) belonged to middle income group. The school in which the action research was conducted is a State Government school. Since the government schools do not collect fees, families belonging to low income group prefer to educate their children in such schools. Almost half (43%) of the sample belonged to middle order of birth, only 18% belonged to last order of birth, 28% belonged to first order of birth and 10% of the sample was single child. More than half of the sample belonged to nuclear families and the rest belonged to joint families. The entire the sample belonged to urban area.

Table 1: Level of Anxiety of the Sample

S. No.	Level of Anxiety	Before Intervention		After Intervention	
		No.	%	No.	%
1	25 and above (Very High)	30	50	1	2
2	17-24 (High)	22	37	10	17
3	9-16 (Moderate)	7	12	31	52
4	1-8 (Low)	1	2	15	25
5	0 (Very Low)	0	0	3	5

(N=60) (Percentages are rounded off)



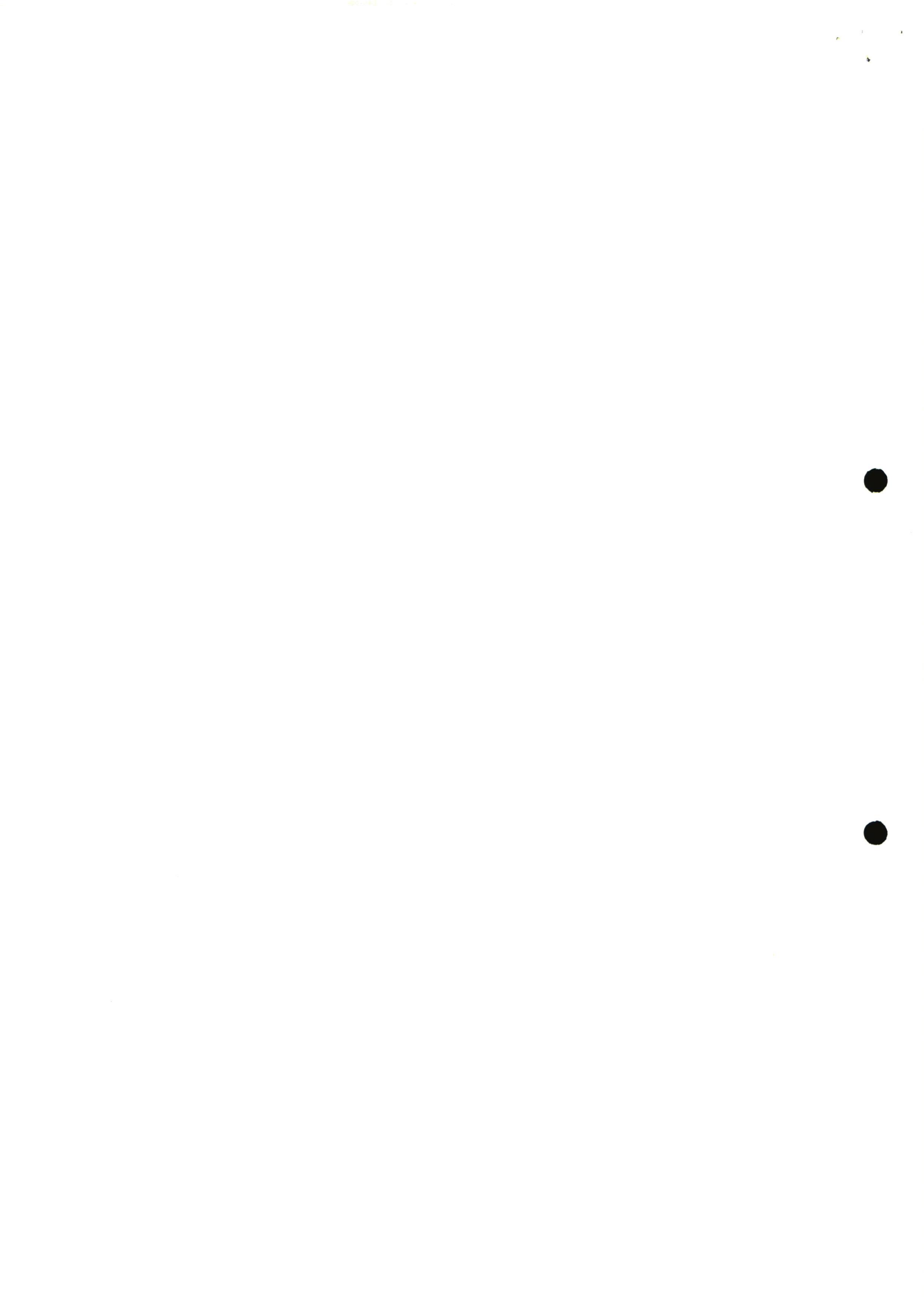


Table 1 indicates that, before intervention, half of the sample had very high anxiety and almost rest half of the sample (49%) had high to moderate anxiety. The anxiety of the students might be due to fear of examination, low-concentration, lack of memory and low confidence during the examinations.

Study Skills	Sum of Squares	df	Mean Square	F	Sig.
Between the groups	5727.008	1	5727.008	1.362E3	.000**
Within the groups	496.317	118	4.206		
Total	6223.325	119			

Table 2: Significance of difference in Mean Anxiety before and after Intervention

Anxiety	N	Mean	Std. Deviation
Before	60	23.4500	6.55207
After	60	11.0667	5.67142
Total	120	17.2583	8.71153

Anova

Anxiety	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	4600.408	1	4600.408	122.523	.000**
Within Groups	4430.583	118	37.547		
Total	9030.992	119			

\*\* Significant at 0.01level



From Table 2, it can be noted that, before intervention, the mean anxiety of the sample was much higher than after intervention. The mean anxiety difference in anxiety before and after Relaxation Training is significant at 0.01 level. A study was conducted by Ergene (2003) on the effective interventions on test anxiety reduction. The study involved 2482 high school students with test anxiety. Cognitive Behavioural techniques combined with skills focused approaches were found to be effective in reducing the test anxiety in these children.

Table 3: Level of the Study Skills of the Sample (N=60)

S. No.	Study Skills	Before Intervention		After Intervention	
		No.	%	No.	%
1	Satisfactory	0	0	60	100
2	Unsatisfactory	60	100	0	0

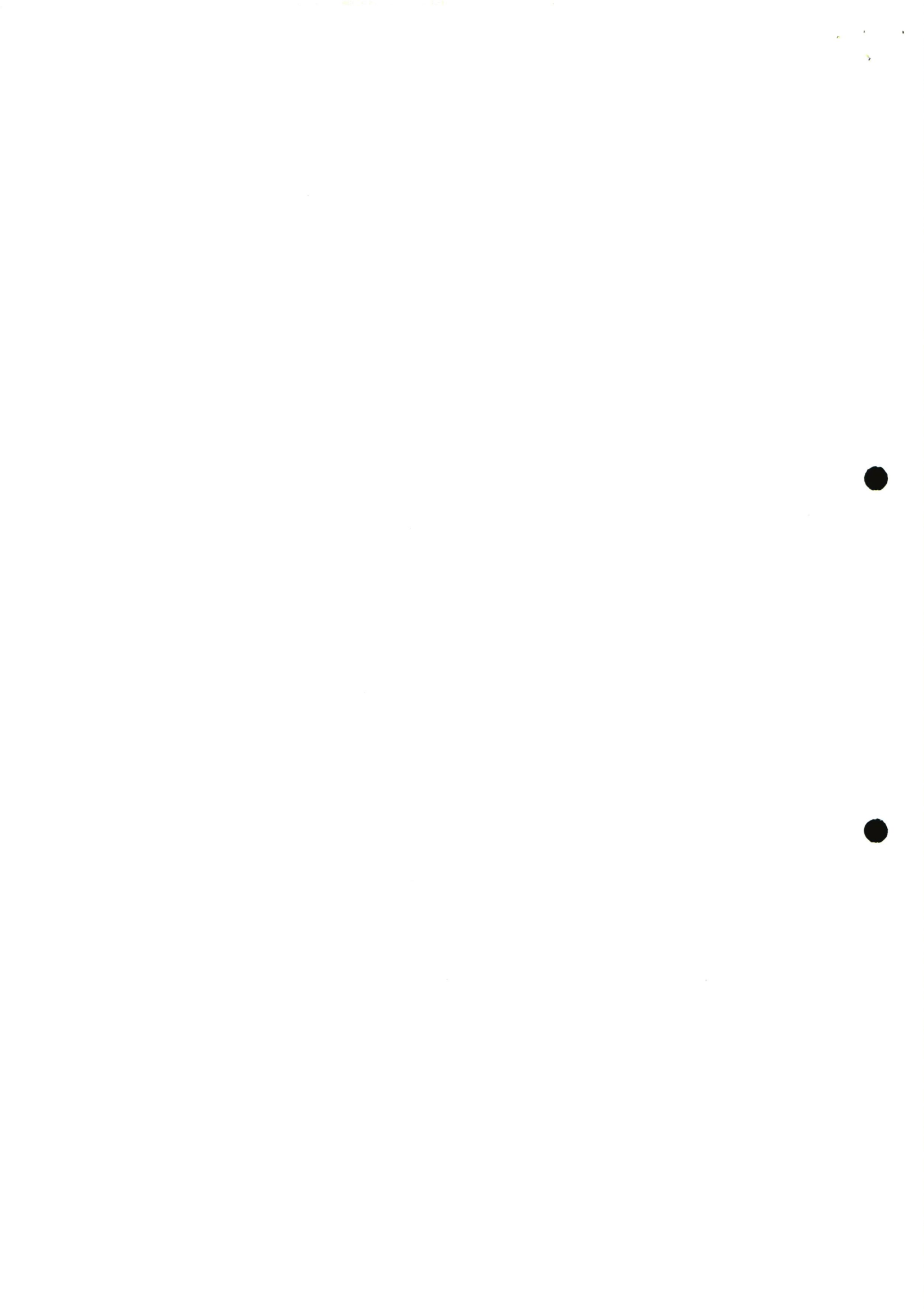
It is shocking to note that before intervention, the entire sample had unsatisfactory study skills. The reason for poor study skills in the students could be incompetent teaching in lower classes and lack of motivation from the parents. Low economic status of the families of the children could also contribute negatively to their study skills. It is gratifying to note that, after Study Skills Training, the entire sample had satisfactory study skills. The new method of learning and also receiving training from a 'new teacher' might be exciting for the students. The good rapport between the researcher and the students might also have motivated the students to do well.

Table 4: Significance of difference in Mean Study Skills before and after Intervention

Study skills	N	Mean	Std. Deviation
before	60	17.6667	2.64041
after	60	31.4833	1.20016
Total	120	24.5750	7.23166

Anova

\*\* Significant at 0.01 level



It can be noted from Table 4 that the mean difference in study skills before and after Study Skills Training is significant at 0.01 levels. This means that the students have benefited from Study Skills Training. Although secondary level teachers often assume that all students have acquired sufficient study skills by the time they reach high school, many have not. Difficulties are especially common in the areas of listening, note-taking, test taking, time management, and organizational skills. Because these skills are an essential part of independent learning, Lamber and Nowacek (2006) offered suggestions for high school teachers on how they can incorporate study skills in their instruction so that all students with learning disabilities acquire these necessary skills.

Table 5: Correlation between Anxiety and Study Skills of the Sample

(N=60)

Variables	Mean	Standard Deviation	R
Anxiety	23.4500	6.55207	-.696*
Study Skills	17.6667	2.64041	

\*\* Correlation is significant at the 0.01 level

Table 5 shows a negative correlation between anxiety and study skills in the sample. It means that when the sample has high anxiety, the study skills will be affected.

Table 6: Correlation between Study Skills and Academic Performance of the Sample

(N=60)

Variables	Mean	Standard Deviation	R
Study Skills	17.6667	2.64041	.445**
Academic Performance	1.4620	25.16715	

\*\* Correlation is significant at 0.01 level

According to Table 6, the sample has a positive correlation between study skills and academic performance. It means that when study skills are better, the academic performance will also be better. A study was conducted by Tuckman (2002), 'evaluating a Program for Enhancing the Study Skills and Academic Performance of Urban High School Students. The study involved 100 academic performance skills combined with

academic performance for study skills. It was concluded that teaching students the Strategies-for-Achievement and their application to practicing time management, building self-confidence, taking responsibility, managing their lives, learning from lecture and text, and preparing for exams enabled them to achieve a higher level of academic performance than comparable students not taught the strategies.

Table 7: Correlation between Anxiety and Academic Performance of the Sample

(N=60)

Variables	Mean	Standard Deviation	R
Anxiety	23.4500	6.55207	-.421
Academic Performance	1.4620	25.16715	

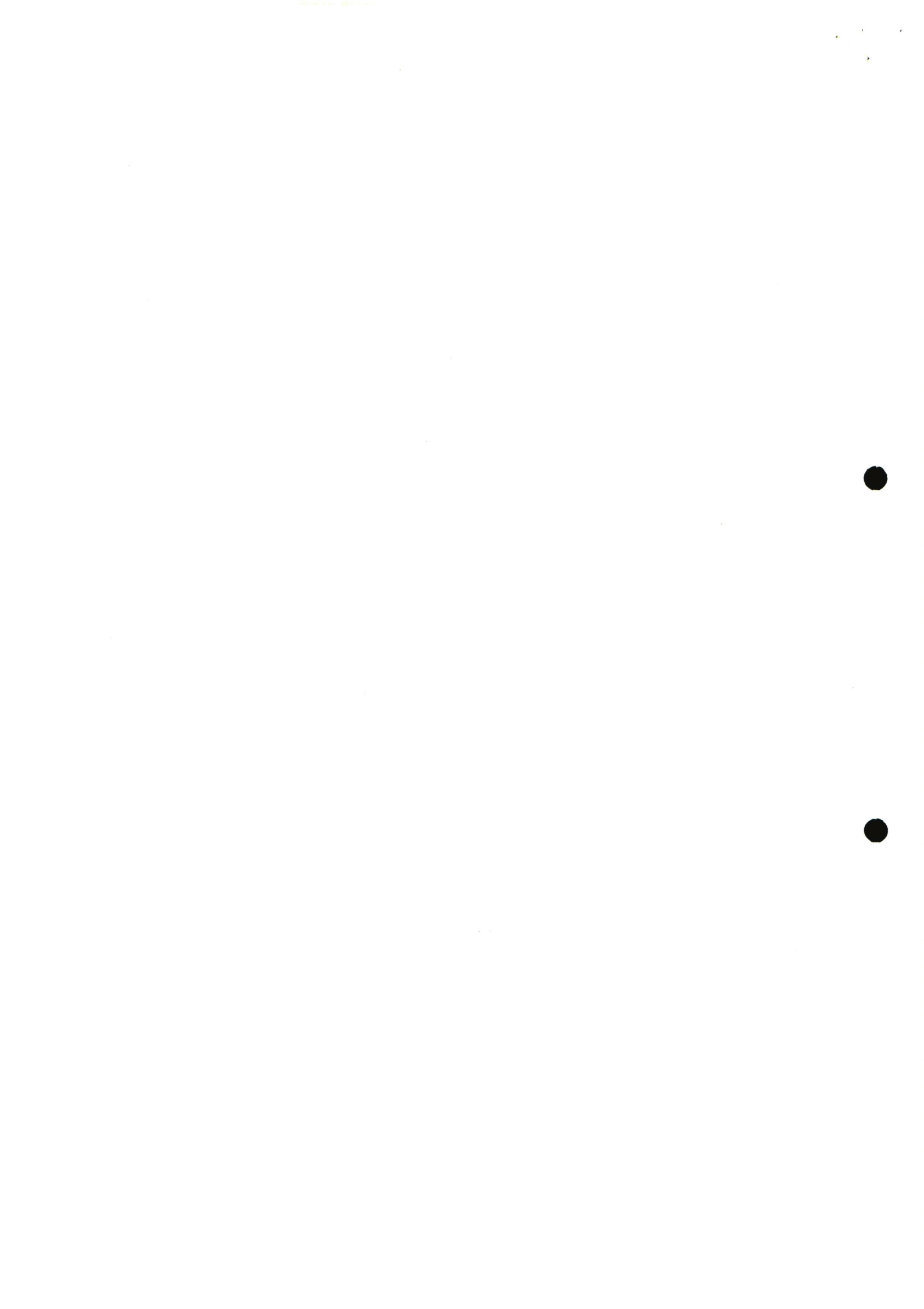
\*\* Correlation is significant at 0.01level

Table 7 clearly depicts a negative correlation between anxiety and academic performance. As it is very evident, as anxiety goes high, academic performance will be poor. If anxiety is managed, students would do better in school. The study done by Yeh et al. (2007) aimed to examine the correlations between academic achievement and levels of anxiety and depression in medical students who were experiencing curriculum reform. The results of this study indicated that there were both positive and negative correlations between academic achievement and anxiety and depression in medical students, regarding differing levels of severity of anxiety or depression. They suggested that the results could represent a reference for teachers on the planning of teaching and assessment programs.

### Empirical Findings

- Forty percent of the selected underachievers belonged to low income group, 22% to middle and 31% to high income group.
- Forty seven percent of the sample was of middle order of birth. Twenty eight percent were of first order of birth, 18% of last order of birth and 10% percent were single child.
- Majority of the sample (69%) belonged to nuclear families and the rest (31%) to joint families.
- The entire sample belonged to urban areas.
- Before intervention, half of the sample had very high anxiety
- After intervention, only 2% had very high anxiety. Before intervention, only 2% had low anxiety whereas, 25% had low anxiety after intervention.





- The difference in mean anxiety before and after intervention is significant at 0.01 level.
- Before Study Skills Training, the entire sample had unsatisfactory study skills.
- The difference in mean study skills before and after Study Skills Training is significant at 0.01 level.
- The coefficient of correlation (-.696) between anxiety and study skills is statistically significant at 0.01 level. This is indicative of a negative correlation between anxiety and study skills in the sample.
- The coefficient of correlation (.445) between study skills and academic performance is statistically significant at 0.01 level. This is indicative of a positive correlation between study skills and academic performance in the sample.
- The coefficient of correlation (-.421) between anxiety and academic performance is statistically significant at 0.01 level. This is indicative of a negative correlation between anxiety and academic performance in the sample.

### Limitations

- A larger sample could not be taken for the study as it was difficult to obtain permission from the authorities of the high school.
- Longer periods of Relaxation Training and Study Skills Training could not be given as the students had the routine tests and assignments in their classes.

### Recommendations

- Counsellors trained in various study skills and cognitive behavioural techniques could be appointed in all schools.
- Anxiety Management Programmes can be conducted in schools for the benefit of the students.
- Educational psychologists can offer their services to the teachers and parents. Parents and teachers could be given Awareness Programmes on learning disabilities in children.

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10

