# Exploring Causes of Test Anxiety and Difficulties in Reading Comprehension of High School Students Khin Phyu Phyu ${ }^{1}$ \& Thin Htet Htet Zaw ${ }^{2}$ 


#### Abstract

The purpose of the present study was to acquire better understanding of how students felt about taking English Reading Comprehension tests. And then, this study hopes to shed light on how test anxiety and difficulties affected Grade X students' English reading achievement. The sample consisted of 577 students ( 274 males and 303 females) from six selected schools in Yangon and Ayeyarwaddy region. In this research, descriptive statistics, independent sample t-test, analysis of variance (ANOVA) were used to find out the significant difference. And then, data were analyzed by means of Pearson's product moment correlations. As the result of the study, it could be concluded that Test Anxiety (TA), Reading Anxiety (RA) were negatively related with students' ERA except using reading strategies (RS). Besides, there were mean differences in ERA among the three groups of students' TA, RA, RS. And then, based on the low groups (138) participants of ERA, the causes of higher test anxiety were explored by listing the frequencies and percentages of students selecting each alternative. According to the result of multiple regression analysis, RA and RS were significantly predicted with ERA but TA did not enter the regression model despite its correlation with ERA.


Keywords: Test anxiety, Foreign language reading anxiety, Strategies, English Reading Achievement

## Introduction

Education is the main pillar in building all round developed nations. The major aim of education is to meet the economic and other needs of society. The development of education is depending on achievement of students in learning. Language achievement is essential for students' educational development. Among them, English is the important source to obtain success in other subjects. So, English reading achievement is crucial

[^0]issue in Myanmar because most of high school students are weak in English language skills especially in reading.

Most of the students received low or failing grades in English as a core subject because they performed poorly on the reading comprehension parts of the test. In brief, comprehension skill is essential for high school students who have to learn most of the subjects written in English. Actually, many learners feel that they cannot effectively comprehend what they read. In order to achieve this goal, students need to develop useful reading strategies and master some reading skills to comprehend the given texts in an effective way and then finish different kinds of tasks successfully.

Today's society tends to overemphasize the importance of tests. Hancock (2001) stated that experiencing test anxiety has various widespread impacts on a person's performance during the test. Moreover, students with test anxiety often think that their entire future depends on their performance on a test. These belief leads to intense worrying that they will fail this test and therefore will have no chances for future success.
So, we should regard test anxiety as a significant problem in students' English reading achievement tests (as cited in Asgharis, 2012).

## Objectives of the Study

The objectives of the study are:

1. To acquire better understanding of how students felt about taking English Reading Comprehension tests.
2. To explore the difficulties for English Reading Comprehension among high school students.
3. To investigate the relationship between Test Anxiety and Difficulties on students' achievement on reading.
4. To study how Test Anxiety and Difficulties affect Grade 10 students' English Reading Achievement.

## Scope and Procedure

- This study is delimited to 577 Grade 10 students of high schools in Yangon, and Ayeyarwady Regions.
- A study on the correlation between Grade 10 students' test anxiety, difficulties and English reading achievement was conducted by descriptive research design and survey method. In
this study, there are two separate questionnaires and ERAT involved.


## Definitions of Key Terms

The following definitions of the key terms were used in this study.
Test anxiety referred to the cognitive aspect, such as disturbing thoughts, distracting emotions, preoccupied feelings or fear of evaluation students have during testing situation. (Cassady, 2004)

Foreign language reading anxiety referred to what Zbornik and Walbrown (1991) regarded as general anxiety invested specifically in the reading process' It is defined as any discomfort or fear accompanied by reading English texts during reading process or in a testing condition.

Reading is a process that involves mental activity embedded in other communication abilities and converts graphic stimuli (letters) into meaning (Dauzat \& Dauzat, 1981 as cited in Oberholzer, 2005).

Strategies refer to the tools that are used by the readers for solving problems and acquiring text information (Barnett, 1988).

English Reading Achievement is the students' reading scores on individually the administered, standardized reading test which is based on Grade 10 English Text Book.

## Literature Review

## Potential Causes of Reading Comprehension Difficulties

Psychologists propose that reading is the interaction between language structure and human thinking. According to factors Influencing Reading, it can be indicated that strategic competence plays a significant role in reading comprehension. Liu (2001) defines reading strategies as the psychological process and these strategies are used by the reader consciously when he is doing a task. Reading strategies include scanning the text to get the main idea of the text; skimming the text quickly to obtain specific information; skipping over new words; using context to guess words; predicting the text content, and so on.

In fact, these students lack proper metacognitive strategies to manage their own reading effectively. Students are uncertain of what metacognitive strategies are and how to use them. Poor readers, especially, do not know what methods are efficient for academic reading, nor do they know how to improve their reading abilities (cited in Parker, 2002). Liu
(2001) conducted a study on the relationship between reading strategies and Reading Comprehension Achievement. High-scoring students used reading strategies more frequently than low-scoring students when doing reading comprehension tasks.

## Reading Anxiety on Performance

The concept of reading anxiety was introduced by Sellers's (2000) who suggested that, "reading anxiety represents a specific aspect of general anxiety that has been invested in the reading process." Thus, whenever uncomfortable feelings are associated with reading a foreign language, the higher the reading anxiety would become. The result of Sellers's (2000) study indicated a significant negative relationship between anxiety and reading performance.

## Potential Causes of Test Anxiety

According to Bonaccio and Reeve, (2010), both the test situation and the test-taker can function as the source of test anxiety. They suggest that previous experiences of test takers have significantly influence on their perceptions, including the familiarity with the test subject, test difficulty and finally the intention of applying test scores (eg, the use of the test results to make important decisions like job applications). Then, Putwain and Daniels, (2010) stated that the self-perception of the test taker is a significant consideration that determines whether individuals who take the tests believe that they are able to pass the standards of the test. These often painful anxious feelings can be associated with parental expectations or competitive learning environment (Mcdonald, 2011).

According to David, (2005), students who experience anxious feelings might perform poorly on a test because of unrealistic comparisons with others. Students who have not learned the material that is included on a test will not do well. Many test anxious students also have significant things causing stress in their lives. Sometimes when they get in a testing situation, there is an automatic chain reaction in our minds and bodies that results in an anxiety reaction.eg. We hear "test" and we start to sweat. (as cited in Batasta, 2005).

There are number of researches reporting text anxiety as one of the major cause for students' underachievement and low performances at different levels of their educational life. Parker (2002) conducted a research
study to explore the relationship between test anxiety and academic performance and found a significant and negative relationship between test anxiety and academic achievement.

## Methodology

This study aims to present about the research methods and procedures that applied in this study in assessing high school Students' causes of test anxiety, difficulties in English, their achievement in English reading and their demographic factors.

## Sample of the study

Participants of this research were Grade 10 students from Yangon and Ayeyarwaddy region by using random sampling technique, in the academic year of 2013-2014. The total number of the participants were 577 (Male $=274$, Female $=303$ ) .

## Research Instrument

The first instrument was Causes of Test Anxiety in English Reading Achievement Test for Grade 10 students. It was modified from Causes of Test Anxiety Questionnaire by Cassady \& Johnson (2002). The second instrument was Difficulties for English Reading Comprehension Questionnaire. The second instrument is divided into two: Foreign Language Reading Anxiety (FLRA)was modified by Saito, Horwitz and Garza, (1999), and using reading strategies was modified by Phakti's (2003).The first instrument has 31 items and the second has 33 items totaling 64 items. After testing the pilot study, Cronbach's alpha of the whole scale was 0.813 . So, Cronbach alpha's value indicated that is satisfactorily reliable.

## Procedure for Collecting Data

After preparing the questionnaire from the pilot study, data collection was conducted on the second week of December, 2013. The data were collected from BEHS 1 Dagon (East), BEHS 1 Tarmwe, BEHS 4 Alone in Yangon Region and BEHS 1 Malzali, BEHS 1Inngapu, BEHS 1 Kwinkaut in Ayeyarwaddy region from the third week of December, 2013 to the first week of January, 2014. To get gender and subject specialization,
data collection made between male and female in the arts and science section from all selected high schools. The data were analyzed by descriptive analysis, independent sample t-test method, ANOVA method, correlation and multiple regression method.

## Data Analysis and Findings

Descriptive Analyses of Grade 10 students' Test Anxiety and Difficulties on English Reading Comprehension (ERA)

To investigate test anxiety and difficulties on their ERC, descriptive statistics was carried out and the results were shown in table 1.

Table 1. Mean Comparison for Test Anxiety and Difficulties for English Reading Comprehension (ERC)

| Variable | $\mathbf{N}$ | Mean | Mean <br> Percentage | Std.Deviation | Minimum | Maximum |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: |
| Test <br> Anxiety(TA) | 577 | 108.030 | $69.70 \%$ | 15.247 | 60 | 147 |
| Reading <br> Anxiety(RA) | 577 | 58.720 | $65.24 \%$ | 8.113 | 25 | 85 |
| Using <br> Reading <br> Strategies(RS) | 577 | 46.590 | $62.12 \%$ | 14.985 | 15 | 72 |

According to descriptive statistics, the mean percentage of Test Anxiety, Reading Anxiety and Using Reading Strategies were $69.70 \%$, $65.24 \%$ and $62.12 \%$ respectively.

In this study, the mean percentage of test anxiety was the highest than that of other variables (see also table 1). Besides, it was found that the mean percentage of using reading strategies was less than others. Based on the descriptive statistics shown in table 1 and figure 1, students' test anxiety, reading anxiety, using reading strategies can be interpreted.


Figure 1. Comparison of Mean Percentage for Test Anxiety, Reading Anxiety and Using Reading Strategies

## Mean Comparisons of Test Anxiety and Difficulties for English Reading Comprehension (ERC) by Gender

To find out the differences TA and difficulties for ERC between male and female, the mean and standard deviation of test anxiety, reading anxiety, using reading strategies on ERAT by gender were reported in table.2. The mean percentages of test anxiety, reading anxiety for female were greater than that of male in ERAT. And then, the mean percentages of using reading strategies for female were greater than that of male. So, it was found that the mean percentages of ERA for female were greater than that of male (see table 2).

Table 2. Means and Standard Deviations of Test Anxiety and Difficulties for English Reading Comprehension by Gender

| Variable | Gender | $\mathbf{N}$ | Mean | Mean <br> percentage | Std. <br> Deviation |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Test Anxiety | Male | 274 | 105.340 | $67.96 \%$ | 15.506 |
|  | Female | 303 | 110.480 | $71.28 \%$ | 14.610 |
| Reading <br> Anxiety | Male | 274 | 58.390 | $64.88 \%$ | 8.589 |
|  | Female | 303 | 59.020 | $65.58 \%$ | 7.660 |
| Using Reading <br> Strategies | Male | 274 | 43.150 | $57.53 \%$ | 15.385 |
|  | Female | 303 | 49.700 | $66.27 \%$ | 13.922 |
| ERA | Male | 274 | 9.480 | $47.40 \%$ | 3.946 |
|  | Female | 303 | 10.870 | $54.35 \%$ | 3.089 |

Note: ERA = English Reading Achievement
To make a more detailed investigation of gender differences of grade 10 students in test anxiety and difficulties for English Reading Comprehension on ERA, independent sample $t$ test was conducted. (see also table 3).

Table 3. The Results of $t$-test for Test Anxiety and Difficulties for English Reading Comprehension on ERAT by Gender

| Variable | $\mathbf{t}$ | $\mathbf{d f}$ | $\mathbf{P}$ | Mean <br> differences |
| :--- | :--- | :--- | :--- | :--- |
| Test Anxiety(TA) | -4.098 | 575 | $\mathbf{0 . 0 0 0}$ | -5.139 |
| Reading Anxiety(RA) | -.930 | 575 | 0.353 | -.629 |
| Reading Strategies(RS) | -5.345 | 575 | $\mathbf{0 . 0 0 0}$ | -6.554 |
| ERA | -4.688 | 575 | $\mathbf{0 . 0 0 0}$ | -1.393 |

According to table.3,there were significant differences between male and female students' TA, RS and ERA except RA at 0.001 level.

Mean Comparison of Test Anxiety, Difficulties for English Reading Comprehension on ERAT by Specialized Combination

To find out combination differences in Test Anxiety, difficulties for ERC on ERAT, descriptive analyses were made. The descriptive analyses showed that the mean scores for TA, RA of art major students were higher than that of science major students. On the other hand, the mean scores for using RS and ERA were less than science major students (see table 4).
Table 4. Means and Standard Deviation for Test Anxiety, Difficulties
for English Reading Comprehension on ERAT by Specialized
Combination

| Variable | Combination | $\mathbf{N}$ | Mean | SD |
| :--- | :--- | :---: | ---: | ---: |
| Test Anxiety | Science | 266 | 105.78 | 15.416 |
|  | Art | 211 | 109.96 | 14.856 |
| Reading Anxiety | Science | 266 | 56.94 | 8.473 |
|  | Art | 211 | 60.24 | 7.476 |
| Reading Strategies | Science | 266 | 54.75 | 11.603 |
|  | Art | 211 | 39.61 | 14.005 |
| ERA | Science | 266 | 12.24 | 3.089 |
|  | Art | 211 | 8.48 | 3.035 |

To make a more detailed investigation of the combination differences of grade 10 students of TA, RA, RS and ERA, independent sample $t$ test was conducted (see table 5).

Table 5. Results of $t$ test for Test Anxiety and Difficulties in English
Reading Comprehension on ERAT by Specialized
Combination

| Variable | $\mathbf{t}$ | $\mathbf{d f}$ | $\mathbf{P}$ | Mean <br> differences |
| :--- | :---: | :---: | :---: | :---: |
| Test Anxiety | -3.310 | 575 | $\mathbf{0 . 0 0 1}$ | -4.179 |
| Reading Anxiety | -4.966 | 575 | $\mathbf{0 . 0 0 0}$ | -3.298 |
| Reading Strategies | 13.996 | 575 | $\mathbf{0 . 0 0 0}$ | 15.140 |
| ERA | 14.717 | 575 | $\mathbf{0 . 0 0 0}$ | 3.761 |

As shown in table .5 , the result of $t$ test pointed out that there was a statistically significant difference between science and art combination students' TA, RA, RS and ERA at 0.001 levels.

## Mean Comparison for Test Anxiety and Difficulties in English Reading Comprehension on ERAT by Region

The means and standard deviations of Test Anxiety and Difficulties for ERC on ERAT by region were presented in table 6.

Table 6. Mean Comparison for Test Anxiety and Difficulties in English Reading Comprehension on ERAT by Region

| Variable | Region | N | Mean | Standard <br> Deviation |
| :--- | :--- | :---: | :---: | :---: |
| Test Anxiety | Yangon | 299 | 104.86 | 15.009 |
|  | Ayeyarwaddy | 278 | 111.45 | 14.783 |
| Reading Anxiety | Yangon | 299 | 57.15 | 8.616 |
|  | Ayeyarwaddy | 278 | 60.41 | 7.177 |
| Reading Strategies | Yangon | 299 | 50.65 | 14.674 |
|  | Ayeyarwaddy | 278 | 45.60 | 15.226 |
| ERA | Yangon | 299 | 10.34 | 3.339 |
|  | Ayeyarwaddy | 278 | 10.09 | 3.805 |

To make a more detailed investigation of the region differences of Grade 10 students in TA, RA, RS and ERA, independent sample t test was conducted (see table 7).

Table 7. Results of $\mathbf{t}$ test for Test Anxiety, Difficulties for English Reading Comprehension on ERAT by Region

| Variable | $\mathbf{t}$ | $\mathbf{d f}$ | $\mathbf{P}$ | Mean differences |
| :--- | :---: | :---: | :---: | :---: |
| Test Anxiety | -5.303 | 575 | $\mathbf{. 0 0 0}$ | -6.583 |
| Reading Anxiety | -4.907 | 575 | $\mathbf{. 0 0 0}$ | -3.253 |
| Reading Strategies | 5.641 | 575 | $\mathbf{. 0 0 0}$ | 6.045 |
| ERA | 0.833 | 575 | .405 | 0.248 |

From the result of independent sample t-test, there were statistically significant difference in TA, RA and using RS at 0.001 level but there was no significant difference in ERA, $\mathrm{P}>0.05$.

## Table 8. ANOVA Results for Test Anxiety, Difficulties for English Reading Comprehension on ERA by School

| Variable |  | Sum of squares | df | Mean | F | p |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Test Anxiety | Between Groups | 7338.122 | 5 | 1467.624 | 6.621 | 0.000 |
|  | Within Groups | 126567.185 | 571 | 221.659 |  |  |
| Reading Anxiety | Between Groups | 2527.375 | 5 | 505.475 | 8.157 | 0.000 |
|  | Within Groups | 35384.701 | 571 | 61.970 |  |  |
| Reading <br> Strategies | Between Groups | 6535.158 | 5 | 1307.032 | 6.077 | 0.000 |
|  | Within Groups | 122804.672 | 571 | 215.069 |  |  |
| ERA | Between Groups | 597.697 | 5 | 119.539 | 10.017 | 0.000 |
|  | Within Groups | 6813.929 | 571 | 11.933 |  |  |

According to table 8, ANOVA results showed that there were significant differences among the schools for TA, RA, RS and ERA of Grade 10 students at 0.001 level.

Table 9. Descriptive Statistics for English Reading Achievement of High School Students

|  | $\mathbf{N}$ | Minimum | Maximum | Mean | SD |
| :--- | :---: | :---: | :---: | :---: | :---: |
| English Reading <br> Achievement | 577 | 1 | 19 | 10.21 | 3.587 |

In order to investigate the relationship between students' test anxiety level, reading anxiety level and using reading strategies, it is needed to describe students' ERA scores. Therefore, students' ERA was mentioned by descriptive statistics and frequency distribution chart. Table .9 showed that mean and SD of the students' ERA scores for the whole sample. It can be clearly seen in figure 2 .


Figure 2. A Grouped Frequency Distribution for Students' English Reading Achievement Scores
Figure 2 indicated the students' ERA scores in terms of Frequency distribution table. It indicated that most of the students got 12, 13 above the medium scores in ERA scores. The bars in the histogram from a curve that was quite similar to the normal, bell shaped curve. Therefore, the frequency distribution of the students' ERA was said to approximately normal. As a consequence, it can be said that students' ERA scores were satisfactory.

## Students' ERA Scores in ERAT in Different Level Groups

Hence, the values of ERA above and below one standard deviation were 14 and 7.According to these values, scores greater than 14 was identified as high group of ERA and less than 7 as low group in ERA.

## Comparison for ERA by Test Anxiety Level

To observe ERA of students based on their TA level, all the students who involved in this study were divided into three groups such as higher anxiety level, moderate anxiety level and lower anxiety level according to the Test Anxiety results.

## Table 10. Descriptive Statistics for English Reading Achievement by Test Anxiety Level

| Variable | Test Anxiety | Mean | Std.Deviation | $\mathbf{N}$ |
| :--- | :--- | :--- | :--- | :--- |
| English Reading <br> Achievement | Higher anxiety | 9.51 | 3.819 | 103 |
|  | Moderate anxiety | 10.15 | 3.376 | 382 |
|  | Lower anxiety | 11.25 | 3.966 | 92 |

In order to know whether there was difference in ERA or not, among three level of students' TA, independent one way analysis of variance (ANOVA)was computed. Then, the results illustrated that there were mean differences in ERA among the three groups of students' TA level.

## Exploring Causes of Test Anxiety

Based on the low group (138) participants of ERA, the causes of higher test anxiety were explored.

Table 11. The Frequencies and percentages of lower group in ERA selecting each alternative in Test Anxiety

| $\begin{aligned} & \text { Item } \\ & \mathrm{s} \end{aligned}$ | Strongly Agree |  | Agree |  | No comment |  | Disagree |  | Strongly disagree |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Frequenc y | Percen t | Frequenc y | Percen <br> t | Frequenc y | Percen <br> t | Frequenc y | Percen t | Frequenc y | Percen <br> t |
| 1 | 30 | 21.7\% | 78 | 56.5\% | 14 | 10.1\% | 6 | 4.3\% | 10 | 7.2\% |
| 2 | 33 | 23.9\% | 58 | 42.0\% | 18 | 13.0\% | 18 | 13.0\% | 11 | 8.0\% |
| 3 | 29 | 21.0\% | 43 | 31.2\% | 21 | 15.2\% | 26 | 18.8\% | 19 | 13.8\% |
| 4 | 33 | 23.9\% | 60 | 43.5\% | 13 | 9.4\% | 16 | 11.6\% | 16 | 18.6\% |
| 5 | 30 | 21.7\% | 78 | 56.5\% | 14 | 10.1\% | 6 | 4.3\% | 10 | 7.2\% |
| 6 | 30 | 21.7\% | 78 | 56.5\% | 14 | 10.1\% | 6 | 4.3\% | 10 | 7.2\% |
| 7 | 38 | 27.5\% | 59 | 42.8\% | 18 | 13\% | 16 | 11.6\% | 7 | 5.1\% |
| 8 | 34 | 24.6\% | 46 | 33.3\% | 26 | 18.8\% | 22 | 15.9\% | 10 | 7.2\% |


| $\begin{array}{\|l} \text { Item } \\ \mathrm{s} \end{array}$ | Strongly Agree |  | Agree |  | No comment |  | Disagree |  | Strongly disagree |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Frequenc <br> y | Percen <br> t | Frequenc y | $\begin{aligned} & \text { Percen } \\ & \mathrm{t} \end{aligned}$ | Frequenc $\mathrm{y}$ | $\begin{aligned} & \text { Percen } \\ & \mathrm{t} \end{aligned}$ | Frequenc <br> y | $\begin{aligned} & \text { Percen } \\ & t \end{aligned}$ | Frequenc <br> y | $\begin{aligned} & \text { Percen } \\ & \mathrm{t} \end{aligned}$ |
| 9 | 32 | 23.2\% | 42 | 30.4\% | 20 | 14.5\% | 27 | 19.6\% | 17 | 12.3\% |
| 10 | 23 | 16.7\% | 58 | 42\% | 23 | 16.7\% | 27 | 19.6\% | 7 | 5.1\% |
| 11 | 31 | 22.5\% | 61 | 44.2\% | 23 | 16.7\% | 13 | 9.4\% | 10 | 7.2\% |
| 12 | 54 | 39.1\% | 54 | 39.1\% | 18 | 13.0\% | 9 | 6.5\% | 3 | 2.2\% |
| 13 | 53 | 38.4\% | 66 | 47.8\% | 9 | 6.5\% | 8 | 5.8\% | 2 | 1.4\% |
| 14 | 27 | 19.6\% | 64 | 46.4\% | 19 | 13.8\% | 20 | 14.5\% | 8 | 5.8\% |
| 15 | 37 | 26.8\% | 49 | 35.5\% | 28 | 20.3\% | 18 | 13.0\% | 6 | 4.3\% |
| 16 | 22 | 15.9\% | 43 | 31.2\% | 27 | 19.6\% | 35 | 29.4\% | 11 | 8\% |
| 17 | 33 | 23.9\% | 63 | 45.7\% | 24 | 17.4\% | 16 | 11.6\% | 2 | 1.4\% |
| 18 | 40 | 35.5\% | 56 | 40.6\% | 17 | 12.3\% | 13 | 9.4\% | 3 | 2.2\% |
| 19 | 38 | 27.5\% | 52 | 37.7\% | 14 | 10.1\% | 27 | 19.6\% | 7 | 5.1\% |
| 20 | 21 | 15.2\% | 37 | 26.8\% | 26 | 18.8\% | 44 | 31.9\% | 10 | 7.2\% |
| 21 | 29 | 21\% | 66 | 47.8\% | 16 | 11.6\% | 19 | 13.8\% | 8 | 5.8\% |
| 22 | 31 | 22.5\% | 52 | 37.7\% | 19 | 13.8\% | 32 | 23.2\% | 4 | 2.9\% |
| 23 | 22 | 15.9\% | 57 | 41.3\% | 23 | 16.7\% | 28 | 20.3\% | 8 | 5.8\% |
| 24 | 24 | 17.4\% | 74 | 53.6\% | 26 | 18.8\% | 13 | 9.4\% | 1 | 0.7\% |
| 25 | 24 | 17.4\% | 37 | 26.8\% | 49 | 35.5\% | 24 | 17.4\% | 4 | 2.9\% |
| 26 | 42 | 30.4\% | 53 | 38.4\% | 24 | 17.4\% | 15 | 10.9\% | 4 | 2.9\% |
| 27 | 32 | 23.2\% | 37 | 26.8\% | 43 | 31.2\% | 21 | 15.2\% | 5 | 3.6\% |
| 28 | 38 | 27.5\% | 64 | 46.4\% | 28 | 20.3\% | 7 | 5.1\% | 1 | 0.7\% |
| 29 | 24 | 17.4\% | 54 | 39.1\% | 40 | 29\% | 11 | 8\% | 9 | 6.5\% |
| 30 | 29 | 21\% | 32 | 23.2\% | 43 | 31.2\% | 30 | 21.7\% | 4 | 2.9\% |
| 31 | 26 | 18.8\% | 54 | 39.1\% | 25 | 18.1\% | 28 | 20.3\% | 5 | 3.6\% |

Table 12. The summary frequency and percentages of lower group in ERA

| Items | Percent (Strong Agree + Agree) | Frequency |
| :---: | :---: | :---: |
| TA 1 | $78.2 \%$ | 108 |
| TA 2 | $65.9 \%$ | 91 |
| TA 3 | $52.2 \%$ | 72 |
| TA 4 | $67.4 \%$ | 93 |
| TA 5 | $78.2 \%$ | 108 |
| TA 6 | $78.2 \%$ | 108 |
| TA 7 | $70.3 \%$ | 97 |


| Items | Percent (Strong Agree + Agree) | Frequency |
| :---: | :---: | :---: |
| TA 8 | $57.9 \%$ | 80 |
| TA 9 | $53.6 \%$ | 74 |
| TA 10 | $58.7 \%$ | 81 |
| TA 11 | $66.7 \%$ | 92 |
| TA 12 | $78.2 \%$ | 108 |
| TA 13 | $86.2 \%$ | 119 |
| TA 14 | $66 \%$ | 91 |
| TA 15 | $62.3 \%$ | 86 |
| TA 16 | $47.1 \%$ | 65 |
| TA 17 | $70 \%$ | 99 |
| TA 18 | $76.1 \%$ | 105 |
| TA 19 | $65.2 \%$ | 90 |
| TA 20 | $42 \%$ | 58 |
| TA 21 | $68.8 \%$ | 95 |
| TA 22 | $60.2 \%$ | 83 |
| TA 23 | $57.2 \%$ | 79 |
| TA 24 | $76.4 \%$ | 98 |
| TA 25 | $44.2 \%$ | 61 |
| TA 26 | $68.8 \%$ | 95 |
| TA 27 | $50 \%$ | 69 |
| TA 28 | $73.9 \%$ | 102 |
| TA 29 | $56.5 \%$ | 78 |
| TA 30 | $44.2 \%$ | 61 |
| TA 31 | $57.9 \%$ | 80 |

As already mentioned above, it can be found that above $60 \%$ of the lower participants in ERA had higher test anxiety in TA $1,2,4,5,6,7,11,12,13,14,15,17,18.19,21,28$. To sum up, conditioned anxiety, irrational thinking, self-perception and unrealistic comparisons with others are the main causes of Test Anxiety.

## Inter correlations of Test Anxiety, Difficulties for English Reading Comprehension and ERA

To test the correlation of TA, RA, RS and ERA, the result was investigated by applying Pearson's Product - Moment Correlation (see table 13).

Table 13. Overall correlations of Reading Anxiety, Test Anxiety and Reading Strategies and ERA

| Variable | TTA | TRA | TRS | ERA |
| :--- | :--- | :--- | :--- | :--- |
| TTA | 1 | $\mathbf{0 . 6 9 0}$ ** | -0.036 | $\mathbf{- 0 . 1 2 4 * *}$ |
| TRA |  | 1 | $\mathbf{- 0 . 1 4 0 ^ { * * }}$ | $\mathbf{- 0 . 2 2 7 ^ { * * }}$ |
| TRS |  |  | 1 | $\mathbf{0 . 8 0 2 * *}$ |
| ERA |  |  |  | 1 |

So, there was high correlation between RA and TA and a slightly low correlation between RA and ERA, TA and ERA. Moreover, there was also high correlation between using RS and ERA.As already mentioned above, TA and RA were negatively related with students' ERA except using reading strategies.

## Regression Analyses for the Prediction of English Reading Achievement

To make a detailed investigation for assessing whether TA, RA, RS were predictors of ERA, multiple regression analysis were conducted. The result of the simultaneous multiple regression analysis pointed out that some factors were significant predictors of achievement (see table 14). This combination of variables significantly predicted ERA, F $(3,573)=$ 1624.965 , $\mathrm{P}<0.001$. The adjusted R squared value was 0.656 . This indicates that $65.6 \%$ of the variance in ERA was explained by the model.

Table14. Simultaneous Multiple Regression Analysis Summary for English Reading Achievement

| Predictors | $\mathbf{B}$ | Std. Error | $\boldsymbol{\beta}$ | $\mathbf{t}$ |
| :--- | :--- | :--- | :--- | :--- |
| Test Anxiety | -0.036 | 0.008 | -0.027 | -0.811 |
| Reading Anxiety | -0.043 | 0.015 | $-0.098^{*}$ | -2.868 |
| Reading Strategies | 0.189 | 0.006 | $0.788^{* *}$ | 31.796 |
| Constant | 4.670 | 0.770 |  | 6.062 |

$\mathrm{R}^{2}=0.656, \mathrm{~F}(3,573)=367.049, \mathrm{p}<.001^{*} \mathrm{P}<.005,{ }^{* *} \mathrm{P}<.001$
According to table 14, RA, RS were significantly related with ERA. The students' Using reading strategies was the strongest predictor for ERA with a Beta value 0.189 . And then, reading anxiety was the second predictor for ERA with a Beta value ( -0.043 ) but Test Anxiety did not enter the regression model despite its correlation with ERA. So, this model can be defined as in the following equation:

$$
E R A=4.670+\left(-0.043 \mathrm{X}_{\text {TRA }}\right)+\mathbf{0 . 1 8 9} \mathrm{X}_{\text {TRS }}
$$

## Conclusion

The main objective of this study was to study how test anxiety and difficulties affect Grade 10 students’ English Reading Achievement by using two questionnaires and ERAT. Based on the descriptive statistic, it was found that the mean percentage of students' Test Anxiety was highest than that of other variables and the mean percentage of using reading strategies was less than others. By observing data analysis, there were significant differences between male and female students' TA, RS and ERA except RA at 0.001 . And then, it can be concluded that there were statistically significant differences between science and art combination students' TA, RA, RS and ERA at 0.001. Besides, there was a statistically regional difference in TA, RA and RS but in the ERA. Continually, ANOVA results showed that there were significant differences among the schools at 0.001.Students with TA, RA, RS level showed significant difference on their English reading achievement. Next, according to overall correlation, a significantly and positive relationship was found among students' ERA between TA and RA(r $=0.690, \mathrm{p}<0.01)$.Moreover, there was a significantly negative correlation between RA and ERA and TA and ERA. There was high positive correlation between using RS and ERA ( $\mathrm{r}=$ 0.802 ).According to the results, the students' using reading strategies was the powerful predictor with a Beta value 0.189. Then, students' RA is also the main predictor for ERA with a Beta value ( -0.043 ) but test anxiety did not enter the regression model despite its correlation with ERA.

## Suggestion

According to Zeinder \& Bensoussan (2002), the negative effect of test anxiety could originate from students' history of learning. As a result, test anxious students anticipate failure about their test result and feel
defeated easily. One method to control test anxiety is to spend more than adequate time studying material and to study in an effective manner so that you feel comfortable with your ability to recall important facts and concepts. One way of helping our school performance is to examine and modify life stressors, and to practice healthy maintenance of our bodies. A type of relaxation training is used to control the conditioned anxiety. To control irrational thinking, we can practice "positive self-talk" which serves to block the irrational negative talk. Moreover, Chou's (2008) found that reading strategies are important in reading comprehension and it is necessary to teach reading strategies in class. It is important to teach students reading techniques to facilitate their reading comprehension especially under testing conditions. Therefore, teachers play a prominent role in alleviating and controlling anxiety in the classroom. To sum up, if students apply reading strategies and they feel happy in learning environment, they can have lower TA, RA and that can support their achievement in ERAT. Thus, the current study pointed out there was an association between students' TA, RA and RS in English Reading Comprehension and their English Reading Achievement.

## References

Asghari, A., \& Baba, M. (2012).Test anxiety and its related concepts: A Brief Review. Journal for Education Science and Psychology,3,(22),1512-1232.
Barnett, M. (1988). More than meets the Eyes. Englewood Cliffs, N.J: Prentice Hall Regents. Retrieved October 2, 2013 from http://www.cayc.ca/backissues/promolit.pdf
Bonaccio, S., \& Reeve,C. L. (2010).The nature and relative importance of students' perceptions of the sources of test anxiety. Learning and Individual Differences. 20, 617-625.

Batasta, G. (2005). Teaching units to lower language anxiety for $8^{\text {th }}$ and $9^{\text {th }}$ grade ESLstudents in Puerto Rico. A master thesis at university of Puerto Rico Mayaguez Campus. Retrieved November 20, 2013 from. http://grad.uprm.edu/tesis/ vargasbatista.pdf.
Cassdy, D. (2004). The impact of cognitive test anxiety on test comprehension and recall in the absence of external evaluative pressure. Applied Cognitive Psychology, 18,311-315.

Chou's, H. H. (2008). Avoidance behavior in adult second language acquisition. Language Learning, 27, 93-107.
Cassady, J.C., \& Johnson, R.E. (2002).Cognitive test anxiety and academic performance. Contemporary Educational Psychology, 27, 270-295.

Goodman, K.S. (2003). Reading: A Psycholinguistic Guessing Game. Journal of the Reading Specialist. Vol.6, 126-135.
Liu, Y.C. (2001). Difference in Choice of Using English Reading Strategies between Successful and Unsuccessful Learners. Foreign Language Teaching. Vol.3, 39-42.
McDonald, A. S. (2011). The Prevalence and Effects of Test Anxiety in School Children. Educational Psychology. 21(1), 89-101.
Phakiti's, A. (2003). A Closer Look at the Relationship of Cognitive and Metacognitive Strategy Use to EFL Reading Achievement Test Performance. Language Testing.Vol.20, No.1, 2656.
Parker, E., Richard, D., \& Hasbrouck, S.(2002). "How To Tutor Students with Reading Comprehension Problems" in Preventing School Failure. P. 45-48.
Putwain, D. W., \& Daniels, R., A. (2010). Is the relationship between competence beliefs and test anxiety influenced by goal orientation? Learning and Individual Differences. 20, 8-13.

Sellars, V. (2000).Anxiety and reading comprehension in Spanish as a foreign language. Foreign Language Annals, 33(5), 512-521. Retrieved from November 21,2013, http://dx.doi.org/10.1111/j.1944-9720.2000.tb01995.x.
Saito, Y., Horwitz, E. K., \& Garza, T. J. (1999).Foreign language reading anxiety. The Modern Language Journal, 83(2), 202-21.
Oberholzer, B. (2005).The relationship between reading difficulties and academic performance among a group of foundation phase learners. Department of Educational Psychology, University of Zululand.
Zbornik, S \&Walbrown, A (1991).The development and validation of a scale to measure readinganxietyReadingImprovement,28,2-12.

Zeidner, M., \& Bensoussan, M. (2002). College students’ attitudes towards written versus oral tests of English as a Foreign Language. Language Testing, 5, 100114.


[^0]:    ${ }^{1}$ Associate Professor, Department of Educational Psychology, Yangon University of Education
    ${ }^{2}$ Senior Assistant Teacher, State High School Dagon (East), Dagon Township, Yangon Division

