

The Impact of Anxiety on The Academic Assessment

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Thesis

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Abstract

There are significant differences between the performance and competence of the students learning English language. During examination some students do not perform according to their competence. These differences arise because of affective factors like motivation and anxiety. It is usually believed that meritorious students perform well under pressure while for less meritorious students their performance decreases under pressure. I will try to see to what extent it is true.

In my thesis I tried to assess the student's anxiety level using self report questions. Then I compared their scores with their performance to see whether the assumption is true and to what extent anxiety affects their performance.

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Chapter One: Introduction

Most educators and administrators judge the quality of a student by taking a single examination. Those exams are usually designed with time-constrained, capsulated and anxiety-provoking format. For example, in the IBA interview the students' performance is checked under extreme stress. The theory is that only a competent student should be able to take the exam and do well under pressure. I will try to prove that there are significant discrepancies in the students' ability and their exam performance. For example a competent student may not perform well due to various unforeseen impeding factors, whereas a student who is relatively weak may do better just by being lucky.

In my thesis paper I will first try to explain what is anxiety and previous works that have been done on that topic. From the previous research works on this issue we know that anxiety is a very important factor in the language performance specially for the testing of the second language. The reason I have chosen the topic is because unlike other factors like motivation and intelligence the effect of anxiety is complex. It can both be facilitative and debilitating. There are very little studies that has been done to test the popular assumption that more competent students are confident in their ability so for them anxiety is mostly facilitative and for less competent students the effect of anxiety is mostly debilitating.

As the subjects of this research, I took fifteen students with variable grades in the exam and tried to correlate their most recent marks with their anxiety scale. If the assumption is true then the scores that the good students receive in the anxiety scale should be mostly facilitative and for weaker students it should be mostly debilitating.

The tool that I have used in conducting my research work is a set of questionnaire given to a number of students. I have chosen students of two categories – the meritorious with proven ability in their school examination and those who are lacking behind in scoring good grade. But, there was limitation in my work. First of all the sample size that I chose was very small. On the other hand the students who answered my questions can not be regarded as correct in answering because

of social desirability bias. That is they may lie to make themselves more socially acceptable or they may not remember. Even though the questions were explained the students may have misunderstood.

Even then it would be observed from the findings of this experiment that the range of facilitating anxiety of the meritorious students was in between 28 to 39 as against the debilitating anxiety score of 17 to 27. Whereas the range of facilitating anxiety of the less meritorious students were found to be 19 to 28 with the debilitating anxiety score of 35 to 46.

Anxiety is a quite natural human criteria. It exists in each and every human being. A baby does not possess this quality. As a child grows, the act of anxiety seems prominent in his/her behavior. The first reason for the anxiety is possibly the fear for doing well in the examination. This sometimes works in a facilitative way. For example because of this anxiety she or he tries to get her/himself prepared to the best of her/his ability. The result is obvious. But when the exam fever makes her frustrated, it brings a debilitating effect in the exam result.

Chapter Two: Literature review:

The theories of language learning will not be sufficient if we only look at the cognitive factors because then we will be omitting a significant factor in the human behavior. According to Earnest Hilgard “purely cognitive theory of learning will be rejected unless a role is assigned to affectability”. (Arnold,1999) The effects of personality factors are significant in the second language learning (Arnold,1999).The Problems with working with affective factors is accurately measuring and scientifically defining a factor. For example we know motivation and cultural conflict affect second language but it is difficult to say to which extent. Some abstract factors like aggression, motivation or extroversive tendencies can not be measured objectively on a psychological test, for we know students who have higher self esteem are usually are better learners but it is difficult to tell that student A has a higher self esteem then student B.

2.1)What is Affective Domain?

This is emotion or feeling related and works in contrast to the cognitive part of the learning. Benjamin Bloom and his colleagues(Karatwohl, Bloom&Masia 1964) provide the definition of affective domain as follows:

- 1) First, an affective factor must allow the learners to tolerate a stimuli ,and be capable of focusing their attention on the stimuli factor. This means the student should have the frame of mind to pay attention and be comfortable with the lesson. For example a shy learner may not be comfortable with public speaking.
- 2) Then a person must be willing to respond to the stimuli without fearing the consequences such as making a bad impression. This means that the learner should be comfortable with making a mistake and then using his intuition and education to guess and learn the correct form.
- 3) Next, they must be motivated to peruse the goal. If the tasks are too difficult the learners will give up and if the tasks are too easy the learners would get quickly bored. The teacher should also

try to understand the learner's type of motivation. For example a learner with an instrumental motivation will accept more difficult tasks than a learner with integrative motivation.

4) Understanding each affective factors and managing them to exemplify the balance between freedom and responsible behavior. The teacher should modify his materials according to the individual needs of different student for example a material that is suitable for an extroverted student may not be suitable for an introvert. So the teacher should balance activities and tasks according to the students' affective condition.

5) Finally, using the knowledge of the affective factors, one should know how to modify one's own behavior and dealings.

2.2) Why are measuring affective factors difficult?

Most tests in personality can be objectively measured but affective factors can only be measured by the learner who is incapable of making an objective analysis of his own feelings. The reasons are:

1) Since it can only be measured by self rating method, self perception may not be very reliable. Externally it can be measured using interview, observation, indirect assessment or a combination of multiple approaches. Campbell and Fiske (1959) have shown that while they may be more reliable but they are uneconomical. Gardner and MacIntyre (1993b) have shown that if a large number of tests are taken there is a high probability that they will be reliable. We frequently have wrong perception of ourselves, that is, a person who feels that he is an extrovert or highly motivated may not be so according to general standard. So in a simple self reflection test he will be unreliable but if multiple methods and large number of tests are taken, a close to correct result may be obtained.

2) Secondly, according to Oller (1989b) the test takers sometimes suffer from "self flattery" and so they select answers that make them look good do not harm them. So in the test the test takers will be biased toward the trait that they like but not necessarily the trait that they have. For example some student may believe that being a serious student means having an instrumental motivation. So he may assess himself as one while spending 50% of his study time in computer games or chat room.

3) Thirdly, it is difficult to design culturally universal tests because some questions may become

difficult to understand from the point of view of another culture; for example, in a question of empathy, when talking to an elderly person, the conversation is inhibited by the respect one must show which will not be understood by someone from a different culture.

2.3 How to find a common affective factor?

Self esteem: It is believed to be the most significant factor in learning a cognitive or affective activity. According to Malinowski we have a need to find acceptance by others.

If we are too harshly criticized our self esteem is affected and our affective filters go up. It is difficult for a person with a low self esteem to try accepting the fact that if they try to speak a new language they might make a few mistakes but if they continue trying they will learn the language. A confident student may fail and keep trying until he gets it right but a person who has a poor self esteem will fail once or twice and give up. In language learning no one can learn without making a few mistakes and it is difficult for some students to accept that.

Inhibition: A child has no ego and no concept of self which adult learners have. Their ego defenses act up to protect a fragile ego from the uncomfortable feeling of weakness. Guiora and Ehrman (1972a) explains that language reflects a part of our identity and learning a second language means giving up the identity to accept a new identity. For example some adult learners will feel very uncomfortable speaking in English using a pure British accent. It is because to them the accents and utterances are part of their identity and it is difficult to give it up and accept a new way of uttering words.

It may be one of the reasons why learners above the critical period rarely develop native like proficiency. For example a person who speaks English with an Indian accent, has to stretch his ego boundaries whereas a child is usually better at it as he has his ego yet to be formed.

Risk taking: Some learners are so afraid of the negative consequences of making a mistake that they are unwilling to try. Language learning is trial and error process. If a student does not makes a mistake it is difficult for him to learn the language. Also according to Rubin and Thompson(1982) one of the skills of a good learner is the ability to make an educated guess and infer meanings from

a conversation or a passage. Learners should try to take risks. If a learner does not take risks it creates major barrier in language learning as we know language can not be learnt as a purely behavioral act.

Extroversion & introversion: Extroverts are people who derive their sense of wholeness from other people. In other words, the feeling good comes from others affirmation. While for introverts they have inner strength of character.

It is wrongly believed that extroverts learn faster than the introverts but the studies have shown that is not the case. Introvert students learn in different way than extrovert students. If they are taught differently they can learn equally well.

Empathy: language reflects a person's identity when a person learns a new language he temporarily must assume the role of another person. To learn a second language he has to empathize with the other person that is he should correctly understand the affective states like emotions of the other person and their cognitive states of communication. Interactive process will break down if we fail to detect the other person's affective states correctly. For example shaking head in some cultures is a sign that the person has not understood and in other cultures it is seen as a sign that the instruction is understood.

Motivation: Crookes & Schmidt (1991) identified integrative motivation as the learner's orientation with regard to learning a second language. It means learner's positive attitude towards the learner's target group and willingness to integrate into the group. In simple words, integrative motivation is learning a language for the prestige of learning a language, for example some people learn French for the prestige of knowing French. Instrumental motivation is the desire to gain or reach a specific goal in the target language. Learners who are instrumentally motivated learn a language to get a degree or a job.

2.4) What is anxiety?:

Even though we have all faced anxiety it is difficult to give scientific definition of anxiety. According to Scovel (1978:134) "It is the feeling of uneasiness, frustration, self doubt, apprehension or worry". According to the current research anxiety has different levels. Trait anxiety is when people worry about many things. According to Macintyre & Gardner (1991c) it is not useful in the prediction of the second language acquisition as it is very subjective. Language anxiety in SLA is a type of situational anxiety. Most modern researchers focus on it.

Situational anxiety is divided into three components for research purposes. Horwitz (al 1986)MacIntyre& Gardner 1989,1991c) divided them into

- 1) communication apprehension: it is the inability to express mature thoughts and ideas
- 2) fear of negative social evaluation: It is caused by the learners need to keep a good social impression on others.
- 3) Test anxiety or fear of performing poorly in an exam.

Even though Anxiety can have a negative effect sometimes anxiety can be helpful

2.5) : How is anxiety related to language learning

"foreign language anxiety can be distinguished from other type of anxiety and it can have a negative effect on language learning process"(Macintyre & Gardner 1991c :112). Anxiety is both debilitating and facilitative. That is, a little anxiety may help the learners while too much anxiety will hamper learning. According to Scovel t.(1978) Facilitating anxiety helps learners to pay attention when learning a language, for example if a material is too easy the learners will quickly get bored. While debilitating anxiety, triggers the flight response in the individual. It motivates the individual to adopt the avoidance behavior. When we are too anxious our inhibition level increases we take less risks and we get de-motivated quickly.

Case study: several studies have shown the benefits of how anxiety facilitates learning a foreign language (Young1992, Horwitz 1990). Bailey's(1983) study showed competitive anxiety was one

of the key factors in success. According to Bailey while competition is debilitating, it some times helps the students to study harder.

Chapter Three: Research Methodology

This thesis explains the methodology of the study to measure the test anxiety in students. The research hypothesis is discussed in the background section. The other parts consist of the selection of participants, the nature of research, the research instrument employed in the data collection, the method of analysis and the research design procedure.

Background information: As mentioned above, anxiety is one of the most important factors in language learning. The two main classification of anxiety are test anxiety and trait anxiety. The trait anxiety is the feature of the student's personality. It is more prominent in the student who has anxiety disorder. It is the anxiety that the students constantly face, for example, a student might be anxious about performing in a simple playground activity (the thing which are normally not seen as a threat). The other is anxiety that is faced in a particular moment in time. It is called the test anxiety or situation specific anxiety. Some people, even though they have high level of proficiency, may find it difficult to concentrate in the exam. Some even have somatic features like sweaty hands; stomach cramps, other students report having difficulty in organizing thoughts, or difficulty in concentration. The objective of this research is to measure how far the test anxiety affects language performance.

The test consisted of two phases - in the first part the students are given a simple questionnaire to measure the students' test anxiety. The questionnaire was used to facilitate the process management and assessment. The answers were all objective and so easy to respond to.

next, in order to find the learners proficiency the researchers took the average mark from their last test as a control. The notion is that the student's proficiency should be the average of those grades. Here we can assume the language proficiency do not change much in short time especially for advanced students. So if the tests are compared against this data they should be reliable.

The problem with the test is, firstly when the students are given a test they do not always give the correct answer. It is because in the self evaluation tests the students usually give wrong answer to show themselves better or worse than their actual condition. Also some students may give answer that they feel is correct even though in the questionnaire there is no right or wrong answer. Next some student in the test may have poor proficiency so their results may not correlate to anything. Lastly since anxiety is a affective factor it is difficult to separate one affective factor from other for

example the student may feel sick and so he may be poorly motivated.

3.1) Participants and setting : The participants were the students of class 8 and their age was on an average 13 years. They study in an English medium school named Ananda Niketon English Medium High School. The school follows direct method and all the instructions are given in English. They had intermediate or upper intermediate language competence.

3.2) Nature of the research

The research is composed of both primary and secondary elements. Here the data from the questioner is primary research and the data from the question paper is secondary research.

As per the theories of educationist J.D Brown(1988) academic research can be done in two categories: secondary research and primary research. He said that the primary research is derived from primary sources of information like a group of students learning a language whereas the secondary research is derived from secondary sources like books about students who are learning a language. The secondary research covers straightforward insights into SLA and analyses of theoretical movements. Primary research covers case studies (longitudinal) and statistical studies (cross-sectional).

Another kind of research is called Quantitative research where numerical data is used to measure and analyze the problem. According to Macky and Gras, “quantitative research generally starts with an experimental design in which a hypothesis is usually followed by the quantification of data” and then some sort of numerical analysis is carried out (p.2). The data is in the form of objective questionnaire. In the test the data is derived and analyzed in a numerical format.

Research design: the study has been conducted in two parts on fifteen students .In the first part of the study the students were given a thirty multiple choice questions sheets with 45 minutes to answer the 30 questions. The second part of the test is also secondary research to compare their anxiety with the result.

The researcher was present for data collection when the test was carried out.

3.3) Method of analysis:

After collecting the data the results are were arranged in a tally. Tables and graphs were used to represent the data. Then the average of their performance was taken. It was used to compare against the recent grade and differences compared to their average performance noted. Then the data found by the comparison is used to create a chart for the correlation table. Finally the correlation is calculated.

When the data is properly organized in a chart the correlation can be calculated. The correlation is usually calculated from -1 to +1. When the correlation tends to +1 it means the values are strongly positively correlated. Which means that the probability that when the value of one factor increases the other to increase is very high. When the correlation factor tends to zero it means that it does not have any significant correlation. When the correlation tends to -1 it means the values are strongly negatively correlated which means that the probability that when the value of one factor increases the other to decrease is very high. If the correlation factor is greater than +0.8 or less than -0.8 it means that the correlation is very strong. If the correlation is greater than -0.5 or less than 0.5 it means the factors are very weakly correlated.

Correlation helps to determine the relationship one factor with the other. It also helps to determine to what extent one factor affects the other.

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The statistics here helps us analyze a number of things. The first two different statistics we can derive from this survey are measured by the two calculations at the end of the survey, “the facilitating anxiety score” and “the debilitating anxiety score”. The facilitating anxiety score measures to what degree, for any given student, anxiety works as a positive factor. It helps us determine to what level anxiety actually works as a positive push, that may even help students achieve better scores. On the other hand “the debilitating anxiety score” measures how much, for other students, anxiety works as a deteriorating factor, which keeps them from getting higher scores in tests.

Chapter four: Results and Discussions

By observing the scores, we see the following conclusions: For students who scored above 80% in exams, the facilitating anxiety scores are between 28 and 39. For this same group of students the debilitating anxiety score is between 16 and 27. On the flip side, for students who scored lower than 80% in exams, the facilitating anxiety scores are between 13 and 28, and the debilitating anxiety scores are between 35 and 46. So by comparing these sets of scores, we are able to draw the conclusion that, for students who are high achievers, anxiety works as a positive force which allows them to score higher in exams. The opposite can be said to be true for students with a score of less than 80%. For these students, anxiety actually hinders their ability to get good grades, by causing them to lose focus and fear facing exams.

The individual scores for each question, also helps us support the observation shown above. For example, for question 4, students with higher scores responded negatively to the statement: “When I am poorly prepared for an exam or test, I get upset, and do less well than even my restricted knowledge should allow.” Students with low scores however agreed quite strongly to this statement. This helps reinforce the fact that while for weaker students anxiety leads to lower grades and high levels of stress, high scoring students are either not affected by anxiety, or allow it to motivate them to do even better in an exam.

From the survey, we find that the first group of students (whose scores are above 80%) have mostly mentioned that they are able to have a clear mind right before the exam begins, and once the exam has started, they are not easily distracted. Time pressure in an exam seems to have little effect on them. They are able to understand the exam questions at first try and have mostly agreed that while they may or may not be nervous before the exam, during the exam they are able to keep a clear head. Weaker students on the other hand, seem to get more nervous the more important the test is, and as a result have mentioned tend do worse. They rarely look forward to exams, as they do not enjoy the challenge. They have also mentioned that they often get so tired from worrying

about an exam prior to the exam, that during and after the exam they stop caring as to what the outcome actually is. Their anxiety causes them to not be able to read the questions properly and have to spend time on going back and reading the question again. They are easily distracted, and have mentioned that their mind goes blank right before the exam and it takes them a while to focus again.

So the findings on the survey point out that there is a significant effects of anxiety on students who have a lower grade range than those who score high.

4.1) Questionnaire

Conducted with the students obtaining more than 80% marks in the School Examinations

		1	2	3	4	5	6	7
1	Nervousness while taking an exam or test hinders me from doing well	3	4	4	4	3	4	4
2	I work most effectively under pressure, as when the task is very important	3	2	4	5	4	1	2
3	In a course where I have been doing poorly, my fear of a bad grade cuts down my efficiency	1	2	3	3	2	3	2
4	When I am poorly prepared for an exam or test, I get upset, and do less well than even my restricted knowledge should allow.	4	2	3	2	2	3	3
5	The more important the examination, the less well I seem to do.	5	5	5	4	4	5	5
6	While I may (or may not) be nervous before taking an exam, once I start, I seem to forget to be	2	2	3	2	1	4	3

	nervous							
7	During exam or test, I block on questions to which I know the answers, even though I might remember them as soon the exam is over.	3	4	3	3	4	3	3
8	Nervousness while taking a test helps me do better	4	4	5	4	5	3	2
9	When I start a test , nothing is able to distract me	1	1	1	2	1	1	1
10	In courses in which the total grade is based mainly on "one" exam, I seem to do better than other people.	5	3	4	3	3	4	3
11	I find that my mind goes blank at the beginning of an exam, and it takes me a few minutes before I can function.	5	4	3	3	4	3	3
12	I look forward to exams	5	4	4	3	3	5	4
13	I am so tired from worrying about an exam, that I find I almost don't care how well I do by the time I start the test.	2	2	1	2	1	3	2

14	Time pressure on an exam causes me to do worse than rest of the group under similar conditions.	5	4	4	2	5	1	4
15	Although "cramming" under pre examination tension is not effective for most people, I find that if the need arises, I can learn material immediately before an exam, even under considerable pressure and successfully retain it to use on the exam.	2	1	2	3	5	4	2
16	I enjoy taking a difficult exam more than easy one	1	2	3	3	2	4	3
17	I find myself reading exam questions without understanding them, and I must go back over them so that they will make sense	1	3	1	3	5	4	5
18	The more important the exam or test, the better I seem to do.	2	1	2	3	2	3	2
19	When I don't do well on difficult items at the	2	1	2	3	3	2	2

	beginning of an exam, it tends to upset me so that I block on even easy question later on							
	Facilitative anxiety	39	37	36	28	30	32	31
	Debilitating anxiety	17	17	23	27	30	19	22

Conducted with the students obtaining less than 80% marks in the School Examinations

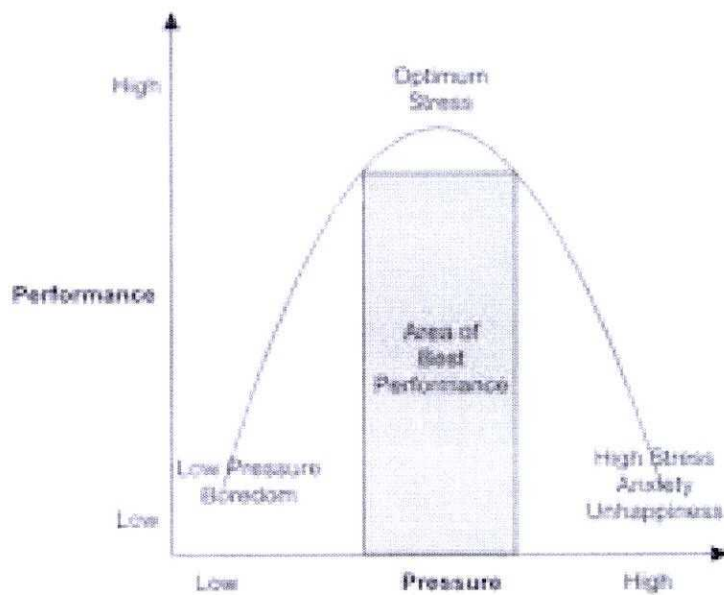
		1	2	3	4	5	6	7
1	Nervousness while taking an exam or test hinders me from doing well	2	2	2	1	4	2	1
2	I work most effectively under pressure, as when the task is very important	1	3	1	2	3	1	2
3	In a course where I have been doing poorly, my fear of a bad grade cuts down my efficiency	4	4	3	5	4	4	3
4	When I am poorly prepared for an exam or test, I get upset, and do less well than even my restricted knowledge should allow.	3	3	4	3	3	5	4
5	The more important the examination, the less well	4	4	3	1	3	4	2

	I seem to do.							
6	While I may (or may not) be nervous before taking an exam, once I start, I seem to forget to be nervous	4	2	4	5	4	4	2
7	During exam or test, I block on questions to which I know the answers, even though I might remember them as soon the exam is over.	2	1	2	3	1	2	2
8	Nervousness while taking a test helps me do better	1	2	1	1	2	4	5
9	When I start a test , nothing is able to distract me	2	4	2	1	4	3	1
10	In courses in which the total grade is based mainly on "one" exam, I seem to do better than other people.	4	4	2	5	2	4	4
11	I find that my mind goes blank at the beginning of an exam, and it takes me a few minutes before I can function.	2	3	2	1	4	2	3
12	I look forward to exams	2	3	2	1	4	3	3
13	I am so tired from worrying about an exam,	2	3	2	1	2	2	1

	that I find I almost don't care how well I do by the time I start the test.							
14	Time pressure on an exam causes me to do worse than rest of the group under similar conditions.	4	4	3	2	5	3	1
15	Although "cramming" under pre examination tension is not effective for most people, I find that if the need arises, I can learn material immediately before an exam, even under considerable pressure and successfully retain it to use on the exam.	2	1	1	5	2	2	1
16	I enjoy taking a difficult exam more than easy one	4	3	5	4	2	5	3
17	I find myself reading exam questions without understanding them, and I must go back over them so that they will make sense	2	1	1	5	2	3	2
18	The more important the exam or test, the better I seem to do.	4	3	5	4	2	5	2

19	When I don't do well on difficult items at the beginning of an exam, it tends to upset me so that I block on even easy question later on	4	5	4	5	4	3	2
	Facilitative anxiety	21	25	19	24	20	13	28
	Debilitative anxiety	37	46	37	38	35	42	30

Results matches with the Yerkes-Dodson Law (Smith, Sarason & Sarason, 1982). This law describes the anxiety performance curve.(See fig 1).This law describes the relationship between anxiety and performance. This law states that if the given task is relatively simple anxiety seems to have little debilitating effects and may actually improve performance but when anxiety increases the extra effort may not compensate the cognitive interference. So it will have negative effect.



The inverted-U relationship between pressure and performance

<http://www.mindtools.com/stress/UnderstandStress/StressPerformance.htm>

Chapter five: Conclusion

Anxiety is a normal feeling that people have when they are faced with something that could be dangerous, difficult, embarrassing or stressful. Exams, job interviews, talking in front of a group, learning a new skill, all make people feel anxious.

Feeling anxious at these times is normal, and can actually be helpful because it motivates you to focus. But people who suffer from strong anxiety find these feelings interfere with lots of normal daily things, like shopping, meeting with friends, going to the movies... lots of stuff. Our observation from the questionnaire has clearly shown that a group of students who are meritorious and with less merit both has the anxiety feeling as a natural phenomenon in their lives. But one could utilize it as a helpful tool to motivate themselves in achieving the objective whereas the other became the victim of anxiety which had driven them away from their goal.

The experiment was conducted under certain limitation. In every statistical calculation a small sample size shows much more deviation from the actual. Here we had to go through a limited sample size because of time constraint and other lack of facilities. Moreover, in such experiments usually the person concerned tries to hide some facts which they may think shows their inefficiencies. Yet under these constraints the observation was conducted. However, the findings that we have obtained do not contradict to the normal psychological behavior of human beings.

Works Cited

Douglas H. Brown, The principle of Language Learning and Teaching (Longman : San Francisco state university, 2000)

Lightbown, Patsy M, and Nina spade How Languages Are Learned (Oxford University Press, USA; 3rd edition) 2006

Horwitz, E.K., Horwitz, M. B. and Cope, J. (1986). Foreign language classroom anxiety.

(Modern Language Journal, 70/2, 125-132)

Kondo, Y. (2010). A study on relationship between language anxiety

and proficiency: In a case of Japanese learners of English.

Andrade, M., & Williams, K. (2009). Foreign language learning anxiety in Japanese EFL university classes: Physical, emotional, expressive, and verbal reactions. (Sophia Junior College Faculty Journal, 29, 1-24).

Macintyre, P.D. & Gardner, R.C(1994). The Subtle Effects of Language anxiety on cognitive processing in the second language. (Language learning, 44, 283-305)

www.linguistik-online.de/34_08/rouhani.pdf

http://faculty.capebretonu.ca/pmacintyre/research_pages/journals/subtle_anxiety1994.pdf

<http://www.mindtools.com/stress/UnderstandStress/StressPerformance.htm>

<http://www.psych.uncc.edu/pagoolka/Testanxiety.html>