



# Construction and Standardization of AMT for Students of Standard 11<sup>th</sup> and 12<sup>th</sup> of Central Gujarat

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## Abstract:

*The statement of problems was "Construction and Standardization of AMT for Students of Standard 11<sup>th</sup> and 12<sup>th</sup> of Central Gujarat" The researcher had decided objectives considering her limited sources, energy and time. Independent variables were gender (male-female), standard of students AMT. Students of standard 11<sup>th</sup> and 12<sup>th</sup> of Gujarati Medium school students of Central Gujarat of education year 2011-12 were selected as universe in the present study. Among which 536 students were selected as sample for the present study. To collect data the researcher had constructed self made tool AMT. After getting data from students, analysis was done by 't' value. Null Hypotheses was constructed to clear her objectives. Analysis was done for each Hypothesis. The field of research was Educational Psychology. The research was practical as well as statistical.*

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**Keywords:** *AMT, Anxiety, Physical fitness, Psychological fitness, Morale values*

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## 1. Introduction

Anxiety can be seen among students in existing time consequently they suffer from various kinds of psychological diseases. Some students experience depression due to examination. They feel guilty when they do not score in examination as per their parents and teachers. Some students make suicide due to failure in examination under depression. The researcher was totally aware of anxiety of students. Hence he has constructed test to measure test and made it standardized.

## 2. The Statement of the Problem

The title of the problem is as under.

Construction and Standardization of AMT for Students of Standard 11<sup>th</sup> and 12<sup>th</sup> of Central Gujarat.

## 3. Objectives of the Study

1. To construct AMT.
2. To standardize AMT.
3. To establish reliability and validity of score of AMT of Students of standard 11<sup>th</sup> and 12<sup>th</sup> of Central Gujarat.

#### **4. Variables**

##### **4.1 Independent Variables**

1. Gender
  1. Boys
  2. Girls
2. Standard
  1. 11<sup>th</sup> Class
  2. 12<sup>th</sup> Class

##### **4.2 Dependent Variable**

Score of AMT is the Dependent Variable of this study.

#### **5. Hypotheses of the Study**

Following 'Null' hypotheses of the present study are as under.

1. There would be no significant difference between average score of boys and girls regarding AMT.
2. There would be no significant difference between average score of students of 11<sup>th</sup> and 12<sup>th</sup> regarding AMT.

#### **6. Importance of the Study**

Importance of AMT is as under.

1. Measurement of level of anxiety among Gujarati Medium school students of standard 11<sup>th</sup> and 12<sup>th</sup> of Central Gujarat would be possible due to the construction of present test.
2. The present study would be helpful to students, teachers and parents.
3. Students worrying about their study would be identified and suggestions would be given to them.

#### **7. Limitations of the Study**

Limitations of the present AMT are as under.

1. The present study is limited to students of standard 11<sup>th</sup> and 12<sup>th</sup>.
2. The present study is limited to students of schools of Central Gujarat.

#### **8. Definitions of the Terms**

##### **8.1 Anxiety**

Distrust and feeling of unprotectedness happening among students regarding educational, family, psychological, physical, morale, and economic is called anxiety.

#### **9. Universe and Sample**

##### **9.1 Universe**

Gujarati medium students studying in standard 11<sup>th</sup> and 12<sup>th</sup> of schools of Central Gujarat during 2011-12 were the universe for the present study.

##### **9.2 Sample**

Several schools were randomly selected from universe. They were selected from Central Gujarat. Students of standard 11<sup>th</sup> and 12<sup>th</sup> were selected by stratified random sampling method. 274 students from standard 11<sup>th</sup> and 262 students from standard 12<sup>th</sup>, making total 536 students were selected in sample in which 259 were boys and 277 were girls.

## 10. Construction of the Tools

Researchers himself is a post-graduate in psychology and possess Master degree in education also. The researcher is teaching in B.Ed. College. The researcher himself has seen students worrying for various reasons. Moreover researcher is deeply experienced scholar of psychology. So he has constructed AMT with the angle of difficulty value and Discrimination value. Other 53 statements were omitted from the Test.

### 10.1 Collection of Statements

Researcher had studied deeply literature regarding anxiety. To list out behaviors regarding anxiety researcher visited the students and got information regarding anxiety. Accordingly he has made a list of nine fields which are as under.

1. Educational Worries.
2. Teachers
3. Parents
4. Examination method
5. Class-room
6. Economic worries
7. Physical fitness
8. Psychological fitness.
9. Morale values.

### 10.2 Construction of Pre-test of AMT

First of all, researcher had constructed 128 statements in preliminary form of AMT. In the first section students had to write his name, name of his school, standard in which he was studying, Gender (boy or girl) etc. Student had to make a round against 'yes' or 'no' according to his/her concurrence or non-concurrence, after reading the statement.

### 10.3 Selection of Sample for tryout of Preliminary form of AMT

The Sample of the study is mentioned in following table.

**Table 1**  
**Information of Selection of sample of School Students**  
**for Preliminary tryout of AMT**

No.	Name of School	Gender	Standard 11 <sup>th</sup>	Total
1.	Shri M. U. Patel Technical High school, Anand	Boys	76	76
		Girls	31	31
	<b>Total</b>		<b>107</b>	<b>107</b>

### 10.4 Analysis of Preliminary Form of AMT

There were 128 statements in preliminary form of AMT. Researcher had found Difficulty Value and Discrimination Value to analyze statements of AMT. Details of which are given hereunder in Table 2.

**Table 2**  
**Difficulty Value and Discrimination Value of Statements of Preliminary form of AMT**

Sr. No. of Statement	Difficulty Value	Discrimination Value
1.	0.59	0.49
2.	0.49	0.49
3.	0.42	0.57
4.	0.70	0.54
5.	0.54	0.43

### **10.5 Construction of Final form of AMT**

Researcher had selected 75 statements out of total 128 statements

#### **10.5.1 Construction of Answer Sheet**

There was a provision of answer in the AMT itself to answer students. There were two options to students "yes" or "No". Students had to make round against their choice.

#### **10.5.2. Product Value of Responses of test**

There were 75 statements in the test. There is 1 Mark for the answer 'yes' and 0 for 'no'.

#### **10.5.3 Reliability and Validity**

The Reliability and Validity of the AMT is mentioned in following table.

**Table 3**

Test-Retest Reliability	Co-relation with K.G. Desai AMT
<b>0.82</b>	<b>0.41</b>

## **11. Collection of the Data**

Collection of data was implemented by AMT from standard 11<sup>th</sup> and 12<sup>th</sup> students of schools of Central Gujarat during 2011-12 by the researcher.

Researcher had collected data from 536 students of 5 (five) schools through AMT constructed by himself. There was no time limit to respond Test. Majority of students had filled up details of test during 25 minutes.

## **12.0 Analysis of the Data**

In present study, Data were analyzed by Excel programme of Computer into average, S.D. Standard error and t-value from the score which was got out on the basis of each variable.

### **12.1 Effect of Gender on Average Score of AMT of Boys and Girls**

The effect of gender was calculated by the researcher. The Statistics of the effect of gender is mentioned in table 5.

**Table 5**

Variable	Total	Average Score	S.D.	t-value
Boys	259	21.83	8.48	6.87**
Girls	277	26.64	8.77	

\*\* Significant at 0.01 level

While observing table 5, significant difference was noted at 0.01 level in the score of AMT of Boys and girls.

### 12.2 Effect of Standard on Score of AMT

The effect of standard was calculated by the researcher. The Statistics of the effect of standard is mentioned in table 6.

**Table 6**  
**Significance of Difference between Average Score of**  
**AMT of the Students of Standard 11<sup>th</sup> and 12<sup>th</sup>**

Variable	Total	Average Score	S.D.	t-value
Students of Standard. 11 <sup>th</sup>	274	25.33	9.48	2.60**
Students of Standard 12 <sup>th</sup>	262	23.25	8.24	

While observing students of score in of AMT of Standard 11<sup>th</sup> and Standard 12<sup>th</sup> significant difference was noted at 0.01 level.

### 13. Findings

In the present study following findings were extracted after analyzing and interpretation of data, collected through self-constructed AMT.

1. Anxiety of girls was observed more compared to boys.
2. Anxiety of students of Standard. 11<sup>th</sup> were more than those of standard 12<sup>th</sup> students.

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