



## A Study of educational achievement in accountancy in Context of some variables

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### 1. Introduction

In India from beginning of the independence, the industrial development has accelerated. Also the contribution of Industrial sector in G.D.P has shown positive impact. Hence, the requirements of commerce based subject in education have been started. For this, development has been done at different levels of education i.e. higher secondary, diploma, graduation, post graduation, finance and teacher training level.

The permission for teaching Accountancy subject was given in 1964. But, in 1966 NCERT had started an experiment for composition of four subjects with commerce and as a sound result from 1976 in universities of teacher training the study of Accountancy subject was started. It is very useful subject with the teaching other subjects like Mathematics, Science, Economics, Commerce and Geography. After higher secondary school education Accountancy subject is very important for gaining proficiency in courses like B.Com. M.Com. B.B.A. and M.B.A. While in professional courses like C.A., C.S., I.C.W.A., C.F.A. the importance of Accountancy subject is not less. Moreover, in our Government recognized board examination of std.12<sup>th</sup> Accountancy subject is compulsory. It is necessary to get the answers of questions like students are how much strong in subject? How much knowledge of that subject? Where and up to which level the weakness is in subject? The answer of these questions is only available from standardized test only of this subject. Hence, research study aims to apply an achievement test in Accountancy subject for std.12<sup>th</sup>.of G.H.S.E.B

### 2. Title of Problem

The title of problem is clarifying the scope of research work. It is as under:

**Study of educational achievement in accountancy in context of some variables**

### 3. Definition of Key words:

It is necessary to give the meaning and explanation about the key words used in research title. The definition of key words is as follows.

#### 3.1 Accountancy

The subject teaches to students of general stream at higher secondary school level in std.11<sup>th</sup> and std.12<sup>th</sup>.

#### 3.2 Study

According to Webster Third New International Dictionary (1961).

1. Application of the mind in acquirement of knowledge is a study.

2. The application in acquisition of knowledge in particular field or to a specific subject matter is a study.

If we think in educational context then study means, 'to try to find out the solution of any problem or research or deep thinking in any subject.

### 3.3 Achievement test

According to K.G. Desai and R.P. Shah (2000).

“Achievement test means the work done in standard series of educational test at school or college level. Generally, the maximum use of this is done in evaluation of work done in different subjects of syllabus.”

In schools, the achievement test measures the acquired knowledge, understanding and skill in context to syllabus of that particular subject. The acquired score by students for this standardized test of Accountancy are treated as an achievement in Accountancy subject.

## 4. Objectives of Study

The objectives of this study are as under:

1. To study the achievement in Accountancy of the students of general stream in std.12<sup>th</sup>.
2. To study the impact of gender on achievement in Accountancy of the students of general stream in std.12<sup>th</sup>.
3. To study the impact of area on achievement in Accountancy of the students of general stream in std.12<sup>th</sup>.

## 5. Hypothesis of Study

. According to Kerlinger (1996). “Hypothesis is a conjectural statement of relation between two or more variable.”

Here, the following hypotheses are constructed.

- Ho<sub>1</sub>** There will be no significant difference between mean score of boys and girls of std.12<sup>th</sup> in achievement of Accountancy subject.
- Ho<sub>2</sub>** There will be no significance difference of mean score between students of urban area and students of rural area in achievement of Accountancy subject.
- Ho<sub>3</sub>** There will be no significance difference between mean score of std.12<sup>th</sup> boys and girls of urban area in Accountancy subject.
- Ho<sub>4</sub>** There will be no significance difference between mean score of std.12<sup>th</sup> boys and girls of rural area in Accountancy subject
- Ho<sub>5</sub>** There will be no significance difference between mean score of std.12<sup>th</sup> boys of urban area and boys of rural area in Accountancy subject.
- Ho<sub>6</sub>** There will be no significance difference between mean score of std.12<sup>th</sup> girls of urban area and girls of rural area in Accountancy subject.

## 6. Rationale of Study

In this time the importance of account and Accountancy is increasing day to day. Due to scientific research the economical and industrial developments is become speedy. To know the result of this development Accountancy is very important. In this time, the accounts are maintained by all business units i.e. from small business unit to large companies. The importance of the accounts is too much, so it is saying that ‘The trader who maintains accounts is always happy.’

For this work the evaluation is very important and the proper tool of evaluation is also needed. That tool is standardized test. In this time at higher secondary level this type of tests are very less prepared. Hence, it is decided to standardize an achievement test in Accountancy subject for std.12<sup>th</sup>. The test is very useful in following manner.

1. Educational experts and specialists get necessary information from this research which will be helpful in other research.
2. The result of this test is valid because the test is standardized in this study.
3. It will helpful to teachers of std.12<sup>th</sup> in making teaching process easy in classroom.

4. It will directive to future investigators and teachers of Accountancy subject.
5. An achievement in Accountancy subject will be available for students studying in std.12<sup>th</sup>.
6. If any weakness in Accountancy subject then it will helpful in removing it.
7. Educational and vocational guidance can be given easily to students.
8. The test is objective type in marking because the responses of students are controlled. There will be no doubt to examiner about the true answer of question and examiner can give marks by checking test objectively. So, the evaluation of test is objective.

## **7. Population, Sample and Research Methodology of Study**

### **7.1 Population of Study**

A sample selected for work of study from the units that unit is known as population. In the this study, Population was students studying in General stream of std.12<sup>th</sup> in Gujarati Medium Higher Secondary Schools of middle Gujarat State.

### **7.2 Sample of study**

Sample is a small part of population. It is one of the parts of population which is selected by for research work. In this study, it is Rajkot District. Out of this district total 46 schools were selected in which 23 from urban area and 23 from rural area, In this way, students of std. 12<sup>th</sup> were selected from total 46 schools in which 23 schools of urban area and 23 schools of rural area from Rajkot district by using cluster sampling technique. Sample size is 500.

## **8. Research Methodology**

The research methodology is heart of any research. The different techniques used by Investigator from the clarifications of problem of research up to getting of scores of it. In this study, the Investigator used survey type research methodology.

## **9. Tool of Research**

According to H. O. Joshi,

“Tool means that thing by which special type data can be collected.”

In this study, for measurement of achievement of students in accountancy subject and for standardization an achievement test was constructed for std.12 in accountancy subject. After construction of test it was standardized as per the step of standardization. In which at initial stage 300 items for pre-piloting, 288 items for piloting and 120 items for final try out was selected. The item selection was made according to structure of std.12<sup>th</sup> Board, opinion of experts, difficulty value and discriminating value.

## **10. Variables of study**

In this study, the variables included were as follows.

- Dependent variable: an Achievement in Accountancy subject
- Independent variables: (1) Gender: (a) Boys (b) Girls & (2) Area: (a) Urban (b) Rural

## **11. Limitations of Study**

The limitations of this study are as under.

1. This study is limited to the students of the schools of Rajkot District.
2. This study is limited to the students of Gujarati medium.
3. The effect of only two variables is incorporated. Other variables are not considered in this study.

## **12. Techniques of Data Collection**

In this study, researcher collected the data from the students studying in general stream of std.12<sup>th</sup> in higher secondary schools from Rajkot district during academic year: 2018-19. For data collection the

researcher approached to principals of various schools and permission was taken. The Investigator selected the students (boys and girls) who were studying in general stream of std.12<sup>th</sup> samples from different school according to survey design.

The necessary instructions were given to students before achievement test was given in class room. The students were asked to write personal information in answer sheet. Then after students were called to write answer in answer sheet for the items of achievement test.

### 13. Methods of Data Analysis

The Researcher checked the answer sheet and gets the scores according to answer key and gets the total score of students. In this study, achievement of accountancy subject was dependent variable, while gender and area were independent variables.

‘t’ and ‘F’ values were calculated with the help of Microsoft Excel to study the significance effect between two groups. Moreover, the researcher calculated various measurements to standardize the test by item analysis. The following statistical calculation was calculated for each group from frequency distribution.

- Prepare frequency distributions for each group.
- The Mean, Median, Standard Deviation, C.V., Quartile Deviation, Skewness, Kurtosis were calculated for each groups.
- The ‘t’ value was calculated to check mean significance between groups.
- The ‘F’ value was calculated to check interaction between variables.
- The graphical thisation of statistical data was done for each group.
- The PR and T-scores were calculated for various groups based on significance of mean difference.

**H<sub>01</sub>** There will be no significant difference between mean score of boys and girls of std.12 in achievement of accountant subject.

For testing the above hypothesis the sample was distributed in two groups according to their gender i.e. boys and girls. For each group the frequency distributions were prepared for achievement test score in Accountancy subject and calculated Mean S.D. and C.V. All this data is shown in Table-1.

**Table: 1 Significance of Achievement level for boys and girls**

Gender	N	Mean	S.D.	SE <sub>M</sub>	‘t’	Significance
Boys	250	67.33	22.84	0.9968	2.09	*
Girls	250	69.42	23.34			

\* Significant at level 0.05

**H<sub>02</sub>** There will be no significant difference of mean score between students of urban area and students of rural area in achievement of Accountancy subject.

For testing the above hypothesis the sample was distributed in two groups as per place of study i.e. urban area and rural area. For each group the frequency distributions were prepared for achievement test score in Accountancy subject and calculated Mean, S.D. and C.V. All this data is shown in Table-2.

**Table 2 Significance of Achievement level for Urban Area students and Rural Area students**

Area	N	Mean	S.D.	SE <sub>M</sub>	‘t’	Significance
Urban	250	71.97	21.30	1.0053	8.35	**
Rural	250	63.57	24.46			

**Ho<sub>3</sub>**: There will be no significance difference between mean score of std.12<sup>th</sup> boys and girls of urban area in Accountancy subject.

For testing of above hypothesis the sample was distributed in two groups as per place of study and gender i.e. urban area boys and urban area girls. For each group the frequency distributions were prepared for achievement test score of Accountancy subject and calculated Mean, S.D. and C.V. On that basis ‘t’ value was calculated. All this data is shown in Table-3

**Table-3 Significance of Achievement level for Urban Area Boys and Urban Area Girls**

Gender	N	Mean	S.D.	SE <sub>M</sub>	‘t’	Significance
Boys	125	71.83	21.77	1.2193	0.23	N.S.
Girls	125	72.11	20.79			

N.S. = not significant

**Ho<sub>4</sub>** There will be no significance difference between mean score of std.12 boys and girls of rural area in Accountancy subject.

For testing of this hypothesis the sample was distributed in two groups as per place of study and gender i.e. rural area boys and rural area girls. For each group the frequency distribution was prepared for achievement test score in Accountancy subject and calculated Mean, S.D. and C.V. On that basis ‘t’ value was calculated. All this data is shown in Table-4.

**Table-4 Significance of Achievement level for Rural Area Boys and Rural Area Girls**

Gender	N	Mean	S.D.	SE <sub>M</sub>	‘t’	Significance
Boys	125	61.65	22.92	1.6115	2.58	*
Girls	125	65.80	25.97			

**Ho<sub>5</sub>** There will be no significance difference between mean score of std.12 boys of urban area and boys of rural area in Accountancy subject.

For testing of above hypothesis the sample was distributed in two groups as per gender and place of study i.e. boys of urban area and boys of rural area. For each group the frequency distributions were prepared for achievement test score of Accountancy subject and calculated Mean, S.D. and C.V. On that basis ‘t’ value was calculated. All this data is shown in Table-5.

**Table-5 Significance of Achievement level of Boys of Urban area and Boys of Rural Area**

Area	N	Mean	S.D.	SE <sub>M</sub>	‘t’	Significance
Urban	125	71.83	21.77	1.3393	7.61	**
Rural	125	61.65	22.92			

**Ho<sub>6</sub>** There will be no significance difference between mean score of std.12 girls of urban area and girls of rural area in Accountancy subject.

For testing of above hypothesis the sample was distributed in two groups as per gender and place of study i.e. girls of urban area and girls of rural area. For each group the frequency distributions were prepared for

achievement test score of Accountancy subject and calculated Mean S.D. and C.V. On that basis 't' value was calculated. All this data is shown in Table-6.

**Table-6 Significance of Achievement level of Girls of Urban area and Girls of Rural Area**

Area	N	Mean	S.D.	SE <sub>M</sub>	't'	Significance
Urban	125	72.11	20.79	1.5133	4.17	**
Rural	125	65.80	25.97			

#### 14. Findings of Study

The important Findings of this study were as below.

1. The reliability of test was found out by (1) Test retest method (2) Split half method (3) Kuder-Richardson 20 and 21 method (4) Rullon method and (5) Flanagan method. The value of it was between 0.78 and 0.96 while range of Standard error of correlation was between 0.005 and 0.025.
2. The validity of test was found out by (1) face validity and (2) content validity by using second exam marks of Accountancy subject. It is 0.91.
3. The significant difference is seen between scores of boys and girls of std.12<sup>th</sup> i.e. the effect of gender is seen on achievement of boys and girls in Accountancy subject which is in favour of girls.
4. The significant difference is seen between score of students of std.12<sup>th</sup> from urban area and rural area which is in favour of urban area students.
5. There is no significant difference seen in achievement of Accountancy subject between scores of boys and girls from urban area i.e. there is an equal achievement of boys and girls in urban area in Accountancy subject.
6. The significant difference is seen in achievement of Accountancy subject between scores of boys and girls from rural area. It shows that the achievement of girls is more than achievement of boys in Accountancy subject in rural area.
7. The significant difference is seen between score of boys from urban area and boys from rural area of std.12<sup>th</sup> which is in favour of urban area boys. It indicates that the achievement of urban area boys is more.
8. The significant difference is seen between score of girls from urban area and girls from rural area of std.12<sup>th</sup> which is in favour of urban area girls. It indicates that the achievement of urban area girls is more.

#### 15. Conclusion

In this time the importance of accountancy subject is increasing with the development of commerce. So, the study constructed an achievement test in Accountancy subject for future of students. The result was send to teachers and principal for necessary guidance in future in accountancy subject. In this way, this study is useful in various ways to students, teachers of schools, parents, society and government.

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