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**Original Research Paper** 



# A Study of Correlates of Achievement of Students in Elements of Book Keeping and Accountancy for STD XI in Mehsana District

Dr. Trupti S. Upadhyay<sup>1</sup>\*

#### **ABSTRACT**

Commerce is one of the subjects which is helpful to understand the economic status of particular region, which leads the market and provide direction to powerful economic status establishment. Subject teaching in classroom should be implemented with reference to achievement, intelligence and numerical ability of the students to get effective result.

Keywords: Elements Of Book Keeping, Accountancy, Mehsana

Need to provide education to all children in the age group of 6 to 18 years. The national Policy on Education 1986 as revised in 1992 has also assigned top priority to provide quality education to children. Education is able to instill in the Child a sense of maturity and responsibility by bringing in him the desired changes according to his needs and demands of ever changing society of which he is an integral part. Speaking more frankly, education bestows upon the child immense. It brings up the child as the parents do. It guides him like an affectionate father and serves him faithfully like a wife. A well educated person is known all over the region. He is able to meet the conflicting challenges and tide over all the difficulties which confront him in day to day living. Not only this, education culturists the individual and helps him in his needs all over the world.

#### Objectives of the study

(1) To study the level of achievement of the students of standard-XI in the subject of the Elements of Book Keeping and Accountancy(2) To study the level of achievement of the students of standard-XI in the subject of the Elements of Book Keeping and Accountancy with reference to gender(3) To study the level of achievement of the students of standard-XI of higher secondary school in the subject of the Elements of Book Keeping and Accountancy with reference to Habitat(4) To study the level of Intelligence of the students of standard-XI with reference to gender(5) To study the level of Intelligence of the students of standard-XI of higher secondary school with reference to Habitat(6) To study the level of numerical Ability of the students of standard-XI with reference to gender(7) To study the level of

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<sup>&</sup>lt;sup>1</sup> Asst. Professor, Soorajba College of Education, Kadi, Gujarat, India

<sup>\*</sup>Responding Author

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numerical Ability of the students of standard-XI of higher secondary school with reference to Habitat. (8) To study the level of Classroom Interaction of the students of standard-XI with reference to gender. (9) To study the level of Classroom Interaction of the students of standard-XI of higher secondary school with reference to Habitat (10) To study the correlation between achievement of the students, intelligence, numerical ability and classroom interaction in the subject of the Elements of Book Keeping and Accountancy with reference to Gender and Habitat of student.

#### Delimitation of the study

Present study was study of achievement, intelligence, numerical ability and classroom interaction of students with selected variable of Gender(Male/Female) and Habitat(Urban/Rural)of standard-XI in the subject of the Elements of Book Keeping and Accountancy, with reference to Mehsana District of the Gujarat State and the selected students were also delimited who are studying during the year of 2014-2015 according to Gujarat State Higher Secondary School Curriculum of subject of the Elements of Book Keeping and Accountancy of Class-XI with Gujarati medium only.

#### Variables of the Study

Independent(Gender and Habitat) Dependent (Achievement, Intelligence, Numerical Ability and Classroom Interaction)

#### Population and sample of the study

In this present research all the students of higher secondary school with commerce stream having subject of Elements of Book Keeping and Accountancy with Gujarati medium and enrolled for the year of 2014-2015 in the elven standard of the Gujarat state Higher Secondary education curriculum in Mehsana District from the Gujarat State were considered as the population of the study. Stratified quota random sampling technique was used for the selection of the students. Selection of the sample all the 10 blocks of the Mehsana District from the Gujarat State were selected as the Sampling and gender wise male and female same as habitat wise rural and urban habitat same proportion of the number of the students from the each Block with selection of schools were taken into consideration of at least 60 percentages of the schools with the ratio of the students for the further study. In this present study Stratified quota random sampling technique applied. Total 1949 male students and 642 female students were selected randomly from the each Block and same as 778 rural habitat and 1813 urban habitat students were selected from each block. Finally it has been seen that that 2591 students were selected for the present study.

#### Tool Used For the Study

(1) Achievement Test (2) Intelligence Test (3) Numerical Ability Test (4) Teacher Effectiveness Scale.

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#### Data Collection and data analysis

Data were collected personally by approaching school principals by visiting schools For the advanced permission for data collection and administration of the tools and tools were applied for the collection of the data. Data collected with help of the different tools and data were analyzed by the partial correlation technique.

### Partial Correlation between Achievement, Intelligence and Numerical Ability of sample of total students of standard-XI

| Sr. No | Tof | al San | nple | 2 | 591 | Partial<br>Correlation | Sig.lev<br>0.9 |      |      | idence<br>erval | sig |
|--------|-----|--------|------|---|-----|------------------------|----------------|------|------|-----------------|-----|
| 1      | r   | Ac     | Int  |   | Num | 0.3                    | 0.29           | 0.33 | 0.31 | 0.34            | SIG |
| 2      | r   | Int    | Num  | _ | Ac  | 0.325                  | 0.31           | 0.35 | 0.31 | 0.35            | SIG |
| 3      | r   | Ac     | Num  | _ | Int | 0.277                  | 0.26           | 0.3  | 0.26 | 0.3             | SIG |

## Partial Correlation between intelligence & Numerical ability with achievement test of sample of total students of standard-XI

|        |              |     |      |   |             | Partial | Signif  | icance | Confi | dence |     |
|--------|--------------|-----|------|---|-------------|---------|---------|--------|-------|-------|-----|
| Sr. No | Total Sample |     | 2591 |   | Correlation | level a | at 0.01 | Inte   | rval  | sig   |     |
| 4      | r            | Ac  | Int  | _ | CI          | 0.381   | 0.38    | 0.42   | 0.4   | 0.45  | SIG |
| 5      | r            | Int | CI   |   | Ac          | 0.048   | 0.028   | 0.068  | 0.028 | 0.068 | NS  |
| 6      | r            | Ac  | CI   |   | Int         | 0.143   | 0.25    | 0.29   | 0.25  | 0.29  | NS  |

# Partial Correlation between Achievement & Numerical ability with Intelligence of sample of total students of standard-XI

| SN | Т | otal Sa | mple |   | 2591 | Partial<br>Correlation | Signif | icance<br>at 0.01 | Confidence<br>Interval |       | sig |
|----|---|---------|------|---|------|------------------------|--------|-------------------|------------------------|-------|-----|
| 7  | R | Int     | Num  | _ | CI   | 0.44                   | 0.45   | 0.49              | 0.48                   | 0.54  | SIG |
| 8  | R | Num     | CI   |   | Int  | 0.046                  | 0.026  | 0.066             | 0.026                  | 0.066 | NS  |
| 9  | R | Int     | CI   | _ | Num  | 0.08                   | 0.06   | 0.1               | 0.06                   | 0.1   | NS  |

# Partial Correlation between Achievement, Intelligence and Numerical Ability of sample of male students of standard-XI

| Sr. No |   | Ma  | ıle | 1 | 1949 | Partial<br>Correlation | Significa<br>at 0 |      | Confi<br>Inte | dence<br>rval | sig |
|--------|---|-----|-----|---|------|------------------------|-------------------|------|---------------|---------------|-----|
| 10     | r | Ac  | Int | _ | Num  | 0.284                  | 0.27              | 0.31 | 0.28          | 0.32          | SIG |
| 11     | r | Int | Num |   | Ac   | 0.344                  | 0.34              | 0.38 | 0.35          | 0.37          | SIG |
| 12     | r | Ac  | Num |   | Int  | 0.295                  | 0.28              | 0.32 | 0.29          | 0.33          | SIG |

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## Partial Correlation between intelligence & Numerical ability with achievement test of sample of male students of standard-XI

| Sr. No |   | Mal | e   | 1 | 949 | Partial<br>Correlation | Signifi<br>level a | icance<br>nt 0.01 | Confi<br>Inte | dence<br>rval | sig |
|--------|---|-----|-----|---|-----|------------------------|--------------------|-------------------|---------------|---------------|-----|
| 13     | r | Ac  | Int |   | CI  | 0.399                  | 0.4 0.44           |                   | 0.42          | 47            | SIG |
| 14     | r | Int | CI  |   | Ac  | 0.047                  | 0.027              | 0.067             | 0.027         | 0.067         | NS  |
| 15     | r | Ac  | CI  |   | Int | 0.149                  | 0.129              | 0.169             | 0.129         | 0.169         | NS  |

## Partial Correlation between Achievement & Numerical ability with Intelligence of sample of male students of standard-XI

| Sr. No |   | Mal | e   | 1949 |     | Partial Correlation | Signif<br>level a | icance<br>at 0.01 | Confi<br>Inte | dence<br>rval | sig |
|--------|---|-----|-----|------|-----|---------------------|-------------------|-------------------|---------------|---------------|-----|
| 16     | r | Int | Num |      | CI  | 0.461               | 0.48              | 0.52              | 0.51          | 0.58          | SIG |
| 17     | r | Num | CI  |      | Int | 0.045               | 0.025             | 0.065             | 0.025         | 0.065         | NS  |
| 18     | r | Int | CI  | - 1  | Num | 0.083               | 0.063             | 0.103             | 0.063         | 0.103         | NS  |

# Partial Correlation between Achievement, Intelligence and Numerical Ability of sample of female students of standard-XI

|        |   |     |     |   |     | Partial     | Significance  |       | Confi | dence |     |
|--------|---|-----|-----|---|-----|-------------|---------------|-------|-------|-------|-----|
| Sr. No |   | Fem | ale |   | 642 | Correlation | level at 0.01 |       | Inte  | rval  | sig |
| 19     | r | Ac  | Int | _ | Num | 0.337       | 0.31          | 0.39  | 0.32  | 0.41  | SIG |
| 20     | r | Int | Num | _ | Ac  | 0.276       | 0.24          | 0.32  | 0.24  | 0.32  | NS  |
| 21     | r | Ac  | Num | _ | Int | 0.236       | 0.196         | 0.276 | 0.196 | 0.276 | NS  |

# Partial Correlation between intelligence & Numerical ability with achievement test of sample of female students of standard-XI

| Sr. No |   | Fema | ıle | Partial 642 Correlation |     | Significance<br>level at 0.01 |           | Confi<br>Inte | dence<br>rval | sig   |     |
|--------|---|------|-----|-------------------------|-----|-------------------------------|-----------|---------------|---------------|-------|-----|
| 22     | r | Ac   | Int | _                       | CI  | 0.394                         | 0.38 0.46 |               | 0.4           | 0.5   | SIG |
| 23     | r | Int  | CI  |                         | Ac  | 0.04                          | 0         | 0.08          | 0             | 0.08  | NS  |
| 24     | r | Ac   | CI  | _                       | Int | 0.124                         | 0.084     | 0.164         | 0.084         | 0.164 | NS  |

# Partial Correlation between Achievement & Numerical ability with Intelligence of sample of female students of standard-XI

| G      |   | _    |     |   | - 10 | Partial     |               | icance |       | nfidence |     |
|--------|---|------|-----|---|------|-------------|---------------|--------|-------|----------|-----|
| Sr. No |   | Fema | ale |   | 642  | Correlation | level at 0.01 |        | l:    | nterval  | sig |
| 25     | r | Int  | Num | _ | CI   | 0.383       | 0.36          | 0.44   | 0.38  | 0.47     | SIG |
| 26     | r | Num  | CI  |   | Int  | 0.044       | 0.004         | 0.084  | 0.004 | 0.084    | NS  |
| 27     | r | Int  | CI  | _ | Num  | 0.073       | 0.033         | 0.113  | 0.033 | 0.113    | NS  |

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### Partial Correlation between Achievement, Intelligence and Numerical Ability of sample of urban habitat students of standard-XI

| Sr. No | 1 | J <b>rba</b> ı | 1   | 1 | 1813 | Partial<br>Correlation | Signif<br>level a | icance<br>at 0.01 | Confi<br>Inte | dence<br>rval | sig |
|--------|---|----------------|-----|---|------|------------------------|-------------------|-------------------|---------------|---------------|-----|
| 28     | r | Ac             | Int | _ | Num  | 0.342                  | 0.33              | 0.37              | 0.34          | 0.39          | SIG |
| 29     | r | Int            | Num | _ | Ac   | 0.27                   | 0.26              | 0.3               | 0.27          | 0.31          | SIG |
| 30     | r | Ac             | Num |   | Int  | 0.228                  | 0.208             | 0.248             | 0.208         | 0.248         | NS  |

## Partial Correlation between intelligence & Numerical ability with achievement test of sample of urban habitat students of standard-XI

|        |       |     |      |  |                     |         |         |       |       | Signif | icance | Confi | dence |  |
|--------|-------|-----|------|--|---------------------|---------|---------|-------|-------|--------|--------|-------|-------|--|
| Sr. No | Urban |     | 1813 |  | Partial Correlation | level a | at 0.01 | Inte  | rval  | sig    |        |       |       |  |
| 31     | r     | Ac  | Int  |  | CI                  | 0.325   | 0.31    | 0.35  | 0.32  | 0.37   | SIG    |       |       |  |
| 32     | r     | Int | CI   |  | Ac                  | 0.049   | 0.029   | 0.069 | 0.029 | 0.069  | NS     |       |       |  |
| 33     | r     | Ac  | CI   |  | Int                 | 0.125   | 0.105   | 0.145 | 0.105 | 0.145  | NS     |       |       |  |

## Partial Correlation between Achievement & Numerical ability with Intelligence of sample of urban habitat students of standard-XI

|        |       | T I - lo |      |   |             | Partial       | Signif | icance   | Confi | dence |     |
|--------|-------|----------|------|---|-------------|---------------|--------|----------|-------|-------|-----|
| Sr. No | Urban |          | 1813 |   | Correlation | level at 0.01 |        | Interval |       | sig   |     |
| 34     | r     | Int      | Num  | _ | CI          | 0.376         | 0.38   | 0.42     | 0.4   | 0.45  | SIG |
| 35     | r     | Num      | CI   | _ | Int         | 0.043         | 0.023  | 0.063    | 0.023 | 0.063 | NS  |
| 36     | r     | Int      | CI   | _ | Num         | 0.072         | 0.052  | 0.092    | 0.052 | 0.092 | NS  |

# Partial Correlation between Achievement, Intelligence and Numerical Ability of sample of rural habitat students of standard-XI

|        |       |     |     |     |     |                     | Signif  | icance  | Confidence |      |     |
|--------|-------|-----|-----|-----|-----|---------------------|---------|---------|------------|------|-----|
| Sr. No | Rural |     |     | 778 |     | Partial Correlation | level a | at 0.01 | Interval   |      | sig |
| 37     | r     | Ac  | Int | _   | Num | 0.357               | 0.27    | 0.35    | 0.28       | 0.37 | SIG |
| 38     | r     | Int | Num | _   | Ac  | 0.244               | 0.29    | 0.37    | 0.3        | 0.39 | SIG |
| 39     | r     | Ac  | Num | _   | Int | 0.209               | 0.24    | 0.32    | 0.24       | 0.33 | NS  |

# Partial Correlation between intelligence & Numerical ability with achievement test of sample of rural habitat students of standard-XI

|        |       |     |     |   |     | Partial     | Significance  |      | Confidence |      |     |
|--------|-------|-----|-----|---|-----|-------------|---------------|------|------------|------|-----|
| Sr. No | Rural |     |     |   | 778 | Correlation | level at 0.01 |      | Interval   |      | sig |
| 40     | r     | Ac  | Int | _ | Num | 0.357       | 0.27          | 0.35 | 0.28       | 0.37 | SIG |
| 41     | r     | Int | Num | _ | Ac  | 0.244       | 0.29          | 0.37 | 0.3        | 0.39 | SIG |
| 42     | r     | Ac  | Num | _ | Int | 0.209       | 0.24          | 0.32 | 0.24       | 0.33 | NS  |

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Partial Correlation between Achievement & Numerical ability with Intelligence of sample of rural habitat students of standard-XI

|        |       |     |     |   |     | Partial     | Significance  |      | Confidence |      |     |
|--------|-------|-----|-----|---|-----|-------------|---------------|------|------------|------|-----|
| Sr. No | Rural |     |     |   | 778 | Correlation | level at 0.01 |      | Interval   |      | sig |
| 43     | r     | Int | Num | - | CI  | 0.342       | 0.27          | 0.35 | 0.28       | 0.37 | SIG |
| 44     | r     | Num | CI  | - | Int | 0.1         | 0.29          | 0.37 | 0.3        | 0.39 | SIG |
| 45     | r     | Int | CI  | - | Num | 0.047       | 0.24          | 0.32 | 0.24       | 0.33 | NS  |

#### CONCLUSION

From the For the purpose of present study, all data collected from students from the higher secondary school from the standard eleven from the Mehsana District of the Gujarat state were selected and administrated tools scored and compiled in various tables to facilitate statistical analysis with reference to sample of students of standard-XI on achievement test, Intelligence test, Numerical ability test and Teacher Effectiveness test as well as correlation found between achievement test Intelligence test Numerical ability test and Classroom Interaction test. The findings and implications of the present study may create an awareness among the students, teachers and experts with reference to Gender-wise male students, Habitat-wise urban habitat students, male urban habitat students and female urban habitat students were found significant in achievement, intelligence, numerical ability and classroom interaction as well as positive and average correlation found between achievement and intelligence, achievement and numerical ability same as Intelligence and numerical ability, which shows that there is average correlation between the achievement, intelligence and numerical ability of the students. Subject teaching in classroom should be implemented teaching in classroom with reference to achievement, intelligence and numerical ability of the students to get effective result.

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