A Study of Speed and Accuracy of the 11th standard Students of Ahmedabad in Relation to their Achievement

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1. Introduction

Change is the law of nature. As needs increase so one can see the change in man and nature. 21st century is going ahead with the shower of communication. New generation has to be alert for self development due to the high expectations of the society. And to do this constant work society has high expectations from the field of education of course.

<div align="center">
21st century means,
Race of challenge
Change and
Competition…....
</div>

In the field of science and technology everyday some new inventions are done. Peoples standard of living is changing day by day. All over the world in each and every field change is seen rapidly. Like morning newspaper becomes scrap at the end of the day so today's latest techniques becomes out of date as every day new inventions and ideas are coming in the market. Thus, Change relates to speed. And for progress change is very essential.

Today, world is touching the height of sky. Many developed nations are planning to habitat on moon and mars whereas in life one has to be very precise. It would be costlier deal if one neglects the preciseness. In today's competitive world speed and accuracy are two main elements very essential for every human being. For one achieves speed but no accuracy and vice versa than one cannot achieve its goal.

To accomplish the predetermined goal if appropriate speed and accuracy are not given importance than even in this era it was possible that we still must be riding horse instead of rocket. Our world journey from bullock cart to rocket is the best example of speed and accuracy. Thus, speed and accuracy both are important factors. The person who is accompanied by these two factors than only that person can achieve the expected result and success.

Education is the base of any nation's development. Speed and accuracy both are important qualities for any student to achieve success in the field of education. These qualities can be cultivated among students. By constant efforts one can achieve it. From the childhood both these qualities i.e. speed and accuracy must be cultivated so that it becomes their habit to perform any task with proper speed and accuracy.

In order to cultivate and nurture the habit of speed and accuracy regularly students should be engaged in the activities like to find similarities between two pictures, to find out difference, to arrange the picture in an orderly manner, to compute the figures, to find out spelling mistakes, measuring words and figures etc. students must be motivated to nurture these qualities.

Speed without precision is total waste of strength and precision without speed is complete waste of time. Students' achievement depends on proper and appropriate speed and accuracy. And that is why

how students are influenced by preciseness and speed is determined by the stated curriculum and one can reach towards proper conclusion.

2. Objectives of the Study
In the present research following are the objectives of the study.
1. To Study the Speed and Accuracy of the IXth Standard Students' of Ahmedabad City.
2. To Study the Speed and Accuracy of the IXth standard Students in relation to their Educational Achievement.
3. To study the Speed and Accuracy of the IXth standard Students in relation to east and west zone of Ahmedabad city.

3. Hypotheses of the Study
Following are the Hypotheses of the study:

Ho_1: There will be no significant difference of mean scores of the speed and Accuracy between higher and lower Achievement students

Ho_2: There will be no significant difference of mean scores of speed and Accuracy between boys and girls having higher Achievement

Ho_3: There will be no significant difference of mean scores of speed and Accuracy between boys and girls having lower Achievement

Ho_4: There will be no significant difference of mean scores of speed and Accuracy between east and west zone students having higher Achievement

Ho_5: There will be no significant difference of mean scores of speed and Accuracy between east and west zone students having lower Achievement.

4. Population of the Study
In the present study, the population includes the IXth standard students of Ahmedabad City.

5. Sample of the Study
In the present study, Ahmedabad city was divided in two broad zones i.e. East Zone & West Zone, out of which two schools from the East Zone of the City and two Schools from the West Zone of the City.

6. Method of study
In the present study the method of the research is descriptive method of which survey method is used for this research.

7. Tools of the Study
In the present research, the researcher has used a standardized Test namely Speed And Accuracy test prepared by K.G.Desai.

8. Interpretation of Data
Ho_1: There will be no significant difference between the mean scores of Achievement students.

Table 1: Analysis of speed and accuracy of students having Higher and lower Educational Achievement

Group	N	Mean	SD	t-Value	Level of
Higher achievement	100	233.69	19.25		0.01
Lower achievement	100	182.82	17.39	23.66	

From the above Table, it is observed that the t_{cal} =(23.66) is more than $t_{0.01}$= 2.58. Thus the

difference is significant and hence, the hypothesis may rejected. Thus, the hypothesis that "There will be no significant difference between the mean scores of the speed and Accuracy between higher and lower Educational Achievement students" will be rejected at 0.01 level. Thus, it is clear that the Higher Achiever students having more speed and accuracy than lower Achiever students.

H_{0_2}: **There will be no significant difference of mean score of speed and accuracy between boys and girls having higher achievement**

Table 2: Analysis of Speed and Accuracy of boys and girls having higher achievement

Group	N	Mean	SD	t-Value	Level of
Boy	500	135.6	16.22	1.20	Not Significant
Girls	50	132.89	15.69		

From the above Table, it is observed that the t_{cal} = 1.20 is less than $t_{0.05}$ =1.96. Thus, the difference is not significant and hence the hypothesis may be accepted. Thus, the hypothesis that "There will be no significant difference of mean score of speed and accuracy between boys and girls having higher achievement" will be accepted.

Ho_3: **There will be no significant difference of mean scores of speed and Accuracy between boys and girls having lower Achievement**

Table 3: Analysis of Speed and Accuracy between boys and girls having lower achievement

Group	N	Mean	SD	t-Value	Level of significance
Boys	50	133.42	15.74	1.16	Not Significant
Girls	50	136.07	16.51		

Interpretation

From the above table, it is observed that t_{cal} = (1.16) is less than $t_{0.05}$=1.96. Thus the difference is not significant and hence the hypothesis   may be accepted. Thus, the hypothesis that "There will be no significant difference of mean scores of speed and Accuracy between boys and girls having lower Achievement"   will be accepted at 0.05 level.

Ho_4: **There will be no significant difference between the mean scores of speed and Accuracy between east and west zone students having higher Achievement**

Table 4: Analysis of Speed and Accuracy between east and west zone students having higer achievement

Group	N	Mean	SD	t-Value	Remarks
East zone	50	137.1	15.34	2.09	0.05
West zone	50	129.8	33.97		

Interpretation

From the above Table, it is observed that the t_{cal}=2.09 is less than $t_{0.01}$=2.58. Thus, the difference is significant 0.05 level and hence the hypothesis is rejected. Thus, the hypothesis that "There will be

no significant difference between the mean scores of speed and Accuracy between east and west zone students having higher Achievement" will be rejected

Ho$_5$: There will be no significant difference between the mean scores of speed and Accuracy between east and west zone students having lower Achievement

Table 5: Analysis of Speed and Accuracy between east and west zone students having lower achievement

Group	N	Mean	SD	t-Value	Remarks
East zone	50	134.1	17.08	0.58	Not Significant
West zone	50	135.98	28.52		

Interpretation

From the above table, it is observed that the t$_{cal}$=0.58 is less than t$_{0.05}$=1.96. Thus, the difference is not significant and hence the hypothesis is accepted. Thus, the hypothesis that "There will be no significant difference between the mean scores of speed and Accuracy between east and west zone students having lower Achievement" will be accepted.

9. Findings of the Present Study

The researcher arrives at the following findings through the data analyzed and interpreted.

The students having higher achievement are more speedy and accurate than the lower achievement students.

There is no difference in speed and accuracy between boys and girls students having higher achievement.

There is no difference in speed and accuracy between the boys and girls students having lower achievement.

The east zone students having higher achievement are more speedy and accurate than west zone students.

There is no difference in speed and accuracy between east and west zone students having lower achievement.

10. Suggestions

The researcher has given the following suggestions on the basis of the data analyzed and interpreted.

The difference exist between the higher and lower achiever , therefore special attention may be given on lower achievement students to increase their speed and accuracy with the help of different educational programme.

The difference exists in speed and accuracy between students of East Zone and West Zone of Ahmedabad. Students of West Zone have a low speed and accuracy. Hence special developmental programmers for these areas may be mobilized in order to help students of West Zone to enhance their speed and accuracy.

The school should organize such a educational programme which increase the speed and accuracy of the students.

At regular interval the school should planned the parents meeting so that they can also know the weightage of the speed and accuracy.

The school should use the psychological test to diagnosis the reason of the lower achievement.

special developmental programs or workshops are needed in order to enhance the speed and accuracy of the students.

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With the help of teacher students should practice of such a test to increase the speed and accuracy for future competitive exam.

11. Conclusion

The researcher has successfully completed the present research study which is to find the effect of variables like educational achievement, zone and gender on the speed and accuracy of IXth standard students of Ahmedabad city and had arrived at conclusions.

- The researcher collected the data from 200 students of standard IX selected through stratified random sampling by using standardized speed and accuracy tool. Further the data was grouped, tabulated and analyzed by statistical methods like Mean, Standard Deviation, t- test and then interpreted.
- It was found that the educational achievement has an effect on speed and accuracy of the students of Ahmedabad City.

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