

DIFFERENT SOCIO-ECONOMIC STRATA OF STUDENTS WITH THEIR CLASSROOM LEARNING BEHAVIOUR AND ACHIEVEMENT IN SCIENCE AT SECONDARY SCHOOL LEVEL IN TELANGANA STATE

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ABSTRACT

Socio- Economic strata (SES) is the measure of the influence that the social environment has on individuals, families, communities, and schools. In many ways SES is related to the concept of social class. Both have financial stability as a foundation for classification. Both are important to a child's optimal development and an adult's satisfaction with life. The SES classifications are established in an effort to find the means of identifying and changing inequalities. The SES is on how to influence the students' achievement in their studies. To calculate different types of SES, students' effectiveness of their behaviour of learning in the classroom is done. In addition, social class has economic differences as a primary influence. The concept of SES considers other influences such as the chance for social or economic advancement, influence on policy, availability of resources, and prestige of the primary occupation.

KEYWORDS: *Socio Economic Strata, Achievement, Classroom Learning Behaviour.*

INTRODUCTION

Themes: Relationship among Socio –Economic Strata, Classroom learning Behavior and Achievement of the Secondary School Students.

Socio-Economic Strata

Socio Economic strata can be defined as the “Individual’s relative position in the community” J.P. Chaplin.

Socio-Economic strata is usually measured in terms of occupation of father, mother, their education , their income, social caste and class, neighbourhood, material possessions, land etc.,

Socio Economic strata (SES) are the measure of the influence that the social environment has on individuals, families, communities, and schools. In many ways SES is related to the concept of social class. Both have financial stability as a foundation for classification. Both are important to a child's optimal development and an adult's satisfaction with life. However, the concept of social class is considered to be continuous throughout one's lifetime and from one generation to the next. The SES classifications are established in an effort to find the means of identifying and changing inequalities. In addition, social class has economic differences as a primary influence. The concept of SES considers other influences such as the chance for social or economic advancement, influence on policy, availability of resources, and prestige of the primary occupation.

Achievement is the major concern of educational policy markers of every country. To a great extent, the achievement of the students affects their future success and performance, underachievement in studies surely influences

their social life as good citizens. So, care should be taken to increase the rate of achievement and find out the hindrances that decrease the achievement rate.

Classroom Learning Behavior

Some researchers have tried to explain classroom life by supposing that it is determined by external constraints and pressures e.g. norms, values and group cultures etc. but this is only an attempt to oversimplify student's behaviour in the classroom. It has been established through various research endeavors that students with the different teachers show behaviour changes across different situations within short periods of time. In case, student's interaction is observed as it happens and if the researcher attempts to discover how students themselves see their behavior, then their behaviour is seen as a continual adjustment to the changing social scene – not simply as determined by whichever group they spend time with. It is, therefore, evident that different teachers see 'different sides' of their student. So, an interaction set concept is necessary to describe a group of students.

Learning takes place from early years of life a child, but formal systematic learning aimed at achievement of specific components with a specific time span of life is expected to be organized by an elderly person, trained person designated as a teacher through an organization recognized as school. If the learners achieve the level of competencies predetermined by prescribed syllabus, within the specific period of time, the school is usually considered as efficient and active.

“Behaviour is one of the single most important factors affecting teaching and learning in schools today”.

Achievement in Science

The present study deals with this test and provides a connecting with the classroom learning behaviour and achievement in science, and knows about the students' knowledge in the science, and similarly to find who get good score that student's classroom learning behaviour to compare the two variables. This Achievement in science test is prepared on the basis of IX class text book, which measures the achievement in science of the IX class students. Science is a very important subject in school levels. It is leading subject if students have to improve their science knowledge applicable to their day to day life, improve scientific thought; hence it is very essential and useful subject

This test is to know about students' knowledge, passion and interest of science subject, interest in experiments, positive attitude towards scientists and the new wisdom of his work.

Statement of the Problem

“Different Socio - Economic Strata of the Students with Their Classroom Learning Behaviors And Achievement In Science at Secondary School Level A Study on Telangana State”

OBJECTIVES OF THE STUDY

- To study the inference of the caste of the students on the Classroom learning behaviour at IX class level.
- To study the inference of the caste of the students on the achievement in science at IX class level.
- To study the difference between the students belong to different religions with regard to their Classroom learning behaviour at IX class level.

- To study the difference between the students belong to different religions with regard to their achievement in science at IX class level.
- To study the difference between different Socio-Economic strata of the students, with regard to their Classroom learning behaviour at IX class level.
- To study the difference between different Socio-Economic strata of the students, with regard to their achievement in science at IX class level.

Hypotheses

- There is no significant difference between the students belonging to different caste groups with regard to their Classroom learning behaviour.
- There is no significant difference between the students belonging to different caste groups with regard to their Achievement in science.
- There is no significant difference in relation to Classroom learning behaviour with respect to their Religion.
- There is no significant difference in relation to Achievement in science with respect to their Religion.
- There is no significant difference in relation to Classroom learning behaviour with regard to their Father Education.
- There is no significant difference in relation to Achievement in science with respect to their Father Education qualifications.
- There is no significant difference between with regard to the Classroom learning behaviour with respect to their Socio – Economic Strata.
- There is no significant difference in relation to the Achievement in science with respect to their Socio – Economic Strata.

METHODOLOGY

Present study identified secondary school students in five districts of Adilabad, Mhabubnagar, Warangal, Karimnagar and Khammam. All students, studying in different schools under the different managements were selected. All the students studying at secondary schools in five districts were considered as the population for the study.

Sample and Sampling Techniques

- The process of sampling involves any procedure using a small number of elements of the whole population, to draw conclusions regarding the whole sample.
- A simple random sample is a subset of a statistical population, in which each member of the subset has an equal probability of being chosen. A simple random sample is meant to be an unbiased representation of a group.
- There are multiple ways of creating a simple random sample. These include the lottery method, using a random number table, using a computer, and sampling with or without replacement.

Sample Size

The sample consists of 600 secondary school students drawn from the population

Tools used in the Study

The following measuring instruments and information gathering devices were used for collecting the necessary research data, with regard to different variables studied in this investigation.

The tools figure in the present research was constructed by the investigator. Consulted subject experts on Except Socio – Economic Strata, which was developed by Prof. B. Kuppuswamy, modified in January 2018 by Dr. Sheik Mohd Salem.

Tool I: Class Room Learning Behaviour

To measure the classroom learning behaviour of students, a questionnaire was developed, based on the Dimensions mentioned by

- *Carolyn M. Evertson* (1988)
- *Dr. Amarjit singh* (2014)
- *V. krishnamacharyulu* (2015)
- *R.C. Mishra* (2016)

Ten Dimensions of the Tool

Hence, the ten Dimensions of the tool are presented below:

- Organization the Classroom
- Maintaining academic rules and Procedures in the school
- Managing students work and improving students accountability
- Maintaining good student behaviour
- Planning and Organization
- Independence in classroom
- Classroom adjustment
- Classroom Environment
- Classroom Climate
- Classroom Learning environment

Tool II: Achievement Test in Science

The tool to measure achievement was developed and standardized by the investigator. The tool measures the achievement of the pupils at IX class level, in the following subjects:

- Biological Science
- Physical Science

The items for achievement test in science subject areas were selected strictly in accordance with the syllabus prescribed by SCERT, Telangana State.

Tool III –Socio-Economic Strata

Personal Data and Socio – Economic strata Scale developed by Prof. B. Kuppaswamy was adopted, which covers the biographical details of the students and Socio- Economic strata Scale aspects. The same scale was updated in January 2018 by Dr. Sheikh Mohd Saleem, Department of Community Medicine, Government Medical College, and Srinagar.

Hence, the above biographical details were included in the personal data, with the help of the socio-economic status. Necessary biographical details were obtained, which facilitate to identify the association of these details for the classroom learning behaviour and achievement in science.

Statistical Techniques Used

The suitable statistical techniques like percentage, 't' test and F- test used to analyze the data and find out the level of significance. Reliability of the tools was calculated by using the Cronbach alpha coefficient method and Kuder-Richardson Reliability co-efficient, mean, standard deviation and Pearson coefficient of correlation have been used.

FINDINGS OF THE STUDY

Findings Based on Incidence of Different Variable

- It can be observed that by social status majority, 61.5% of students belong to BC community, followed by OC community 16.3%, SC community 15.2% and ST community 7%.
- It can be observed that from the sample of 600, majority of students (85%) belong to Hindus followed by Christians (8.3%) and Muslims (6.5%).
- It can be observed from total of 600 students by socio economic strata, some of them 40% of students belongs to upper low class, followed by 36.8% of students belong to lower middle class, 12.2% of students belong to upper middle class, 6.2% of students belong to lower class and 4.8% of students belong to upper class.

Findings based on interrogational Analysis

- To know the achievement in science of students with respect to their caste. The OC, BC, SC and ST students are involved in the study. ANOVA showed that there is significant difference at 0.01 levels among different caste groups. Hence, it can be concluded that there is significant difference between four types of caste group's students with respect to their achievement in science.
- The below statements are based on LSD table 4.23. As follow
- From the OC students, there are 98 out of 600 students. It is significant at 0.01 level. Further, it is found that the OC students' achievement in science is better than that of BC and SC students.

- From the BC students, there are 369 out of 600 students. It is significant at 0.05 level. It is found that the BC students' achievement in science is better than that of SC students. There is no significance difference between SC and ST students
- It is found that the classroom learning behaviour and achievement in science of secondary school students with respect to their Religion i.e., Hindu, Muslim and Christianity, which is not significant at 0.05 levels. Hence, it can be concluded that there is no significant difference in classroom learning behaviour and achievement in science of Hindu, Muslim and Christian students with respect to their religion.
- There are five categories of socio economic strata. They are i) upper class, ii) upper middle class, iii) lower middle class, iv) upper low class and v) low class, based on the category the classroom learning behaviour of the students. While analyzing the data, the significance is at 0.05 levels among different socio economic strata of students. Hence, it can be concluded that there is significant difference in socio economic strata of students, with respect to their classroom learning behavior.
- The below statements are based on LSD table 4.56.
- It can be observed that the classroom learning behaviour of upper low socio-economic strata students is better than that of upper middle and lower middle class of socio-economic strata students.
- Based on the categories of Socio – economic strata and achievement in science: While analyzing the data, the significance at 0.05 levels among different socio economic strata of students. Hence, it can be concluded that there is significant difference socio economic strata of students with respect to their achievement in science. The below statements are based on LSD table 4.58.
- It can be observed that the achievement in science of upper class socio-economic strata students is better than that of lower middle class, upper low class and low class of socio-economic strata students.
- It can be observed that the achievement in science of upper middle class socio-economic strata students is better than that of upper low class and low class of socio-economic strata students.
- It can be observed that the achievement in science of upper middle class socio-economic strata students is better than that of lower middle class of socio-economic strata students.
- It can be observed that the achievement in science of lower middle class socio-economic strata students is better than that of upper low class and low class of socio-economic strata students.

Findings from Correlation Analysis

- It is found that the relationship between classroom learning behaviour and achievement in science of secondary school students of OC community, as it can be seen from the table 4.24., there is no significant difference at 0.05 level, with $r = 0.126$. Hence, it can be concluded that there is a very weak correlation between classroom learning behaviour and achievement in science of secondary school students of OC community.

- It is found that, between classroom learning behaviour and achievement in science of secondary school students of BC community, as it can be from the table 4.25., there is no significant difference at 0.05 level, with $r = 0.067$. Hence, it can be concluded that there is no correlation between classroom learning behaviour and achievement in science of secondary school students of BC community.
- It is found that the relationship between classroom learning behaviour and achievement in science of secondary school students of SC community, as it can be seen from the table 4.26., there is a significant difference at 0.05 level, with $r = 0.212$. Hence, it can be concluded that there is a weak positive correlation between classroom learning behaviour and achievement in science of secondary school students of SC community.
- It is found that the relationship between classroom learning behaviour and achievement in science of secondary school students of ST community, as it can be seen from the table 4.27., there is no significant difference at 0.05 level with $r = 0.062$. Hence, it can be concluded that there is no correlation between classroom learning behaviour and achievement in science of secondary school students of ST community.
- It is found that the relationship between classroom learning behaviour and achievement in science of secondary school students of Hindu religion, as it can be seen from the table 4.30., there is no significant difference at 0.05 level, with $r = 0.027$. Hence, it can be concluded that there is no correlation between classroom learning behaviour and achievement in science of secondary school students of Hindu religion.
- It is found that the relationship between classroom learning behaviour and achievement in science of secondary school students of Muslim religion, as it can be seen from the table 4.31, there is no significant difference at 0.05 level, with $r = 0.096$. Hence, it can be concluded that there is no correlation between classroom learning behaviour and achievement in science of secondary school students of Muslim religion.
- It is found that the relationship between classroom learning behaviour and achievement in science of secondary school students of Christian religion, as it can be seen from the table 4.31, there is no significant difference at 0.05 level, with $r = 0.262$. Hence, it can be concluded that there is a weak correlation between classroom learning behaviour and achievement in science of secondary school students of Christian religion.
- It is found that the relationship between classroom learning behaviour and achievement in science of secondary school students of Socio- Economic Strata of Upper Class Students, as it can be seen from the 4.59., there is no significant difference at 0.05 level, with $r = 0.256$. Hence, it can be concluded that there is a weak positive correlation between classroom learning behaviour and achievement in science of secondary school students of Socio- Economic Strata of Upper Class Students.
- It is found that the relationship between classroom learning behaviour and achievement in science of secondary school students of Socio- Economic Strata of Upper Middle Class Students, as it can be seen from the 4.60., there is no significant difference at 0.05 level, with $r = 0.083$. Hence, it can be concluded that there is no correlation between classroom learning behaviour and achievement in science of secondary school students of Socio- Economic Strata of Upper Middle Class Students.
- It is found that the relationship between classroom learning behaviour and achievement in science of secondary school students of Socio- Economic Strata of Lower Middle Class Students, as it can be seen from the 4.61., there

is no significant difference at 0.05 level, with $r = 0.014$. Hence, it can be concluded that there is no correlation between classroom learning behaviour and achievement in science of secondary school students of Socio-Economic Strata of Lower Middle Class Students.

- It is found that the relationship between classroom learning behaviour and achievement in science of secondary school students of Socio- Economic Strata of Upper Low Class Students, as it can be seen from the 4.62., there is significant difference at 0.01 level with $r = 0.20$. Hence, it can be concluded that there is a weak positive correlation between classroom learning behaviour and achievement in science of secondary school students of Socio- Economic Strata of Upper Low Class Students.
- It is found that the relationship between classroom learning behaviour and achievement in science of secondary school students of Socio- Economic Strata of Lower Class Students, as it can be found from the 4.63., there is no significant difference at 0.05 level with $r = 0.011$. Hence, it can be concluded that there is no correlation between classroom learning behaviour and achievement in science of secondary school students of Socio- Economic Strata of Lower Class Students.

Verification of the Hypotheses

On the basis of above discussion of the results and conclusions drawn regarding classroom learning behaviour and achievement in science, the hypotheses have been verified which is presented here under:

Eleventh Hypothesis (H1): “There is no significant difference between the students belonging to different caste groups with regard to their Classroom learning behaviour.”

The results showed that there is no significance difference at 0.05 level on Classroom learning behaviour in respect of community of the students. Hence, this hypothesis is accepted. Hence, it is concluded that there is no significance difference among Classroom learning behaviour with respect to OC, BC, SC and ST secondary school students.

Twelfth Hypothesis (H2): “There is no significant difference between the students belonging to different caste groups with regard to their Achievement in science”

From the investigation, it is a found that there is a significance difference at 0.01 level between Community secondary school students in their Achievement in science. Hence, the null hypothesis is rejected and based on the mean values, it is concluded that the Achievement in science of OC Community students is better than that of the BC and SC Community students. Similarly, BC Community students are better than that of the SC Community students.

Thirteen Hypotheses (H3): “There is no significant difference in relation to Classroom learning behaviour with respect to their Religion”

The results showed that there is no significance difference at 0.05 level on Classroom learning behaviour in respect of Religion of students. Hence, the null hypothesis is accepted. Hence, it can be concluded that there is no significant difference in Classroom learning behaviour with respect to Religion.

Fourteenth Hypothesis (H4): “There is no significant difference in relation to Achievement in science with respect to their Religion”

The results showed that there is no significance difference at 0.05 level on Achievement in Science with respect to Religion of the students. Hence, the null hypothesis is accepted. Hence, it is concluded that there is no significant difference in Achievement in Science with respect to Religion

Nineteenth Hypothesis (H5): “There is no significant difference between with regard to the Classroom learning behaviour with respect to their Socio – Economic Strata”

From the investigation, it is found that there is a significance difference at 0.05 levels, with regard to Socio-Economic strata of students on their classroom learning behavior. Hence, the null hypothesis is rejected and based on the mean values, it is concluded that the classroom learning behaviour of Upper low class family back ground of students is better than that Upper middle and Lower Middle class family background students.

Twenty Hypotheses (H6): “There is no significant difference in relation to the Achievement in science with respect to their Socio – Economic Strata”

From the investigation, it is found that there is a significance difference at 0.05 levels with regard to Socio-Economic strata of students on their achievement in science. Hence, the null hypothesis is rejected and based on the mean values, it is concluded that the achievement in science of Upper class family back ground of students is better than that Lower Middle class, Upper Low class and Low class family background students. Similarly Upper middle class family back ground of students is better than that Lower Middle class, Upper Low class and Low class family background students. Similarly, Lower middle class family back ground of students is better than that Upper Low class and Low class family background students.

CONCLUSIONS

The present study is aimed at finding influence of classroom learning behavior, achievement in science and socio-economic strata of secondary school students and relationship among them. The above components were analysed in relation to gender, locality, type of school, medium of instruction, father educational qualifications, mother educational qualifications and Socio –Economic strata of the students. Further to understand the relationship between the Classroom learning behaviour and achievement in science of secondary school students, correlation technique was applied.

There is no significance difference with respect to their caste i.e., OC, BC, SC & ST students with regard to classroom learning behavior. But, there is significance difference with respect to OC, BC, SC & ST students in their achievement in science. OC students’ achievement is better than that of BC and SC students. Similarly, BC students’ achievement is better than the SC students. It is shown with regard to OC, BC and ST students that there is no significant correlation between classroom learning behaviour and achievement in science. The SC students have weak correlation between classroom learning behaviour and achievement in science. Hence, their classroom learning behaviour influences to get good marks in achievement in science. Hence, there is a need to take measures to improve achievement of BC, SC and ST students. Teachers need to focus to work with parents of BC, SC and ST students to support them in improving their children’s achievement in science.

There is no significance difference among the Hindu, Muslim and Christian students with regard to classroom learning behaviour and achievement in science. There is no significant correlation between classroom learning behaviour and achievement in science of Hindu students and Muslim students, but there is a significant correlation between

classroom learning behaviour and achievement in science of Christian students. It is found that with regard to Hindu and Muslim students, there is no significant difference between classroom learning behaviour and achievement in science though they got high or low marks, hence it does not influence on their classroom learning behavior.

The classroom learning behaviour of the students hail from Socio- Economic strata of Upper low is better than the students belong to Socio- Economic strata of Upper middle and lower middle class.

The Achievement in science of the students hailing from Socio- Economic strata of Upper class and Upper middles class and Lower middle is better than that of Upper low and Lower Socio- Economic strata.

Educational Implications & Recommendations

- Every scientific research study bears some educational implications. The present research study has some important educational implications. The study has revealed the relationship between classroom learning behaviour, Achievement in Science and Socio-Economic Strata of secondary school students.
- Findings of the study revealed that there exist a significant difference with reference to gender, locality, medium of instruction, type of school, residence, caste background, father educational qualifications, mother Educational qualifications and Socio – economic Strata of the students school located. The study light upon the ten dimensions of classroom learning behaviour, which include Organizing the Classroom, Maintain academic rules and Procedures in the school, Managing students work and improving students accountability, Maintaining good student behaviour, Planning and Organization, Independence in classroom, Classroom adjustment , Classroom Environment, Classroom Climate and Classroom Learning environment.
- The study also focuses on useful information related to the students' achievement in science with regard to Socio-Economic Strata of the secondary school students.
- This study is also helpful in the improving student's classroom learning behaviour of the students. The findings of the study also helpful in providing necessary information and guidance to improve the personality of the students by giving them positive direction, making them realize the importance of positive behaviour and learning behaviour at their age.
- Further, the findings of study also helps the teachers, psychologists and educational planners in building and adopting special educational modifications for rectification of undesirable behaviour among school students and motivate them towards their goals in life.
- Further, findings related to Socio – Economic strata and Achievement in science of the secondary school students implies a direction to the policy makers to suggest measures for developing classroom learning behaviour and achievement in science. More particularly, for lower Socio-Economic strata of students.
- The findings of the present study indicate that there is a significant relationship among classroom learning behaviour, achievement in science and Socio- Economic Strata of the students. Similarly, the parent's educational level and their children achievement in science are also positively correlated. It implies the significance of adult literacy and opportunities for higher education, with special reference to the people belonging to lower Socio – Economic strata, in view to help their children better achievement in academics.

REFERENCES

1. Adegoke, Sunday Paul Osokaya, Modupe M. (2018) "Socio-Economic Background and Access to Internet as Correlates of Students Achievement in Agricultural Science". *International Journal of Evaluation and Research in Education (IJERE)*, Year :2018, Volume: 4, Issue:1, Page no :16
2. Ajmer, Farmhand (2013) "Socio Economic Status and its Relation to Academic Achievement of Higher Secondary School Students". *Journal : IOSR Journal Of Humanities And Social Science*, Year : 2013, Volume: 13 Issue:6, Page no :13-20
3. Raju, T. J. M. S. (2016) "Relationship between Socio Economic Status and Academic Achievement". *Journal: IRA International Journal of Education and Multidisciplinary Studies (ISSN 2455–2526)*, Year: 2016, Volume: 3, Issue: 3.
4. Rogers, William (2011) "Classroom behaviour: a practical guide to effective teaching, behaviour management and colleague support". *Journal: Classroom behaviour: a practical guide to effective teaching, behaviour management and colleague support, volume -, Issue -6, page no: 175–206.*
5. Santa saran, O Binate Othman, Norasmah (2007) "Relationship between Family Socio-Economic and Student Achievement in Moral Education among Secondary School Students". *Journal : International Journal of Management and Applied Science*, Year :2007, Issue: 8, Page No: 2394–7926
6. Sudsier, M A, Muraleedharan, Pillai P G (1987) "Science achievement in relation to intelligence and socio-economic status: A study of secondary school students in Aizawl". *Journal: Indian Journal of Psychometry and Education*, Year: 1987, Volume: 18, Page no: 37–44.
7. White, Karl. R. (1982) *the relation between socioeconomic status and academic achievement*. *Psychological Bulletin*, 91(3), 461–481
8. Yang, Yang (2003) "Dimensions of Socio-economic Status and their Relationship to Mathematics and Science Achievement at Individual and Collective Levels". *Publication: Scandinavian Journal of Educational Research*, Year: 2003, Volume: 47, Issue: 1, Page no: 21–41.

