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#### **CORRELATIONAL STUDY OF** SOCIAL INTELLIGENCE **AND ACADEMIC** ACHIEVEMENT OF HIGHER SECONDARY STUDENTS

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# Abstract:

The research study reported here explores the Correlational study of Social Intelligence and Academic Achievement of among Higher Secondary students studying in Junior Colleges from Arts, Science and Commerce both Boys and Girls in Solapur City. 1600 Higher secondary students opted for Arts, Commerce, Science streams, i.e. 695 Boys & 905 Girls (both XI and XII class) were chosen randomly through Stratified Random Sampling method The higher secondary girls have better Social intelligence and Academic Achievement than Boys. The higher secondary Arts students' low Social intelligence and Academic achievement than Science and Commerce.

Key words: Social Intelligence, Academic Achievement, Correlational, Higher Secondary Students.

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## **Introduction:**

Today, the youth are encompassed with forthcoming consequences in the career life due to cut throat competitive exams, assignments & career oriented courses, group dynamics etc. Although the objectives of developing life skills, core values, at various stages mould the students. But as we visualize the present scenario, it arouses certain questions that are unanswerable. At the end of the schooling whether an individual is emotionally, socially independent? Academic achievement occupies a very important place in education as well as in the learning process. It has become an index of child's future in this highly competitive world and most important goals of educational process. Academic achievement is a key mechanism through which adolescents learn about their talents, abilities and competencies which are an important part of developing career aspiration.

The students at higher secondary stage need to know the attributes of being socially intelligent enable themselves to face challenges of social life circumstances reduce conflicts. They need to be able to be cooperative and collaborate with their co-learners, understand one another and cultivate cultural and ethical values, reduce conflicts stress and achieve success.

Social intelligence is closely related to the affective domain where the students need to become social being, understanding the social situations empathetically. Hence this present research had aimed to study the correlation between Social Intelligence and Academic Achievement of Higher Secondary students in Solapur City. The study attempted to find out whether Social intelligence influences Academic Achievement or vice versa in terms of gender and stream. The study had been conducted hopefully and revealed certain findings and conclusions in the light of the research.





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# **Objectives of the Research:**

- 1. To study the correlation between social intelligence and academic achievement scores of higher secondary students.
- 2. To study the correlation between social intelligence and academic achievement scores of higher secondary boy students.
- 3. To study the correlation between social intelligence and academic achievement scores of higher secondary girl students.
- 4. To study the correlation between social intelligence and academic achievement scores of higher secondary Arts stream students.
- 5. To study the correlation between social intelligence and academic achievement scores of higher secondary Science stream students.
- 6. To study the correlation between social intelligence and academic achievement scores of higher secondary Commerce stream students.

# **Hypothesis of the Research:**

- 1. There is no significant correlation between social intelligence and academic achievement scores of higher secondary students.
- 2. There is no significant correlation between social intelligence and academic achievement scores of higher secondary boy students
- 3. To study the correlation between social intelligence and academic achievement scores of higher secondary girl students.
- 4. There is no significant correlation between social intelligence and academic achievement scores of higher secondary Arts stream students.
- 5. There is no significant correlation between social intelligence and academic achievement scores of higher secondary Science stream students.
- 6. There is no significant correlation between social intelligence and academic achievement scores of higher secondary Commerce stream students.

# **Tools and Techniques of the Research:**

- 1. **Social Intelligence Scale**: The data for the present study was collected with the help of N. K. Chadda and Usha Ganesan's Social Intelligence Scale (1986) which intends to measure the Social intelligence of higher secondary students of Arts, Science & Commerce (Both XI and XII Std.).
- 2. Academic achievement Tests for Arts, Science and Commerce stream: A Standardized Academic Achievement Tests prepared by researcher for XI & XII Arts, Science and Commerce Streams subjects. An Objective Type Tests were administered for (Both XI and XII Std.) students. As the Tests consisted of multiple choices, the researcher has opted for KR-20 formula Kuder-Richarson formula 20 to evaluate the reliability of the tests.

**Method and procedure:** This study was designed to correlate the Social Intelligence and Academic achievement of Higher Secondary students. As such, Descriptive method of research was employed.





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**Sample:** The sample for this study was collected from 8 Junior colleges of Solapur City. The sample consisted of 695 Boys & 905 Girls (both XI and XII class) of Arts, Science and Commerce stream.

# Statistical treatment: The data collected was subjected to the following statistical treatment:

- 1. Normality assessment of the variables by Shapiro Wilk test.
- 2. To establish the correlation between outcome (dependent) variable and explanatory variables, the correlation coefficients (r) were obtained. The r is calculated by using the Karl-Pearson's product moment correlation method. In the present study, the academic achievement scores of higher secondary students is taken as dependent variable and social intelligence of higher secondary students is measured as explanatory variables

# **Application of the Statistical Measures and Interpretation of the Data:**

- 1. The normal distribution of social intelligence scores of higher secondary students has been checked, then applied the parametric tests of significance. The mean social intelligence scores of higher secondary students is 101.29 and standard deviation is 10.01. The coefficient of skewness is -0.47 is closed to zero followed by coefficient of kurtosis is 0.92. Therefore, it means that, the curve of the above distribution is approximately follows a normal distribution. The ShapiroWilk test statistic (W=0.97571, p<0.001) showed normal distribution.
- 2. The distribution of higher secondary students by Academic Achievement scores. It means shows the mean academic achievement scores of higher secondary students is 28.97 and standard deviation is 7.05. The coefficient of skewness is -0.01 is closed to zero followed by coefficient of kurtosis is 0.26. Therefore, it means that, the curve of the above distribution is approximately follows a normal distribution. The Shapiro Wilk test statistic (W=0.98691, p=0.2974) showed normal distribution.
- Correlation Analysis and Interpretation of the Data:
  - In the present study, the academic achievement scores of higher secondary students is taken as dependent variable and social intelligence of higher secondary students is measured as explanatory variables.
- To establish the correlation between outcome (dependent) variable and explanatory variables, the correlation coefficients (r) were obtained. The r is calculated by using the Karl-Pearson's product moment correlation method

Objective 1: To study the correlation between social intelligence and academic achievement scores of higher secondary students.

A relationship between social intelligence and academic achievement scores of higher secondary students is found to be positive and statistically significant (r=0.8165, p<0.05) at significance level of 5 percent. Hence, the  $H_0$  is rejected and  $H_1$  is not rejected.

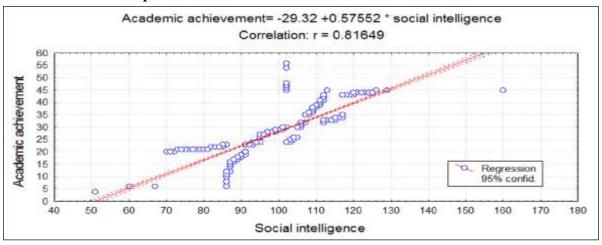
The social intelligence and academic achievement scores of higher secondary students are dependent on each other.





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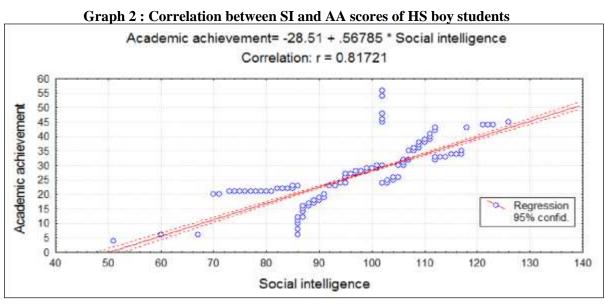
Graph 1: Correlation between SI and AA scores of HSS



Objective 2: To study the correlation between social intelligence and academic achievement scores of higher secondary boy students

A relationship between social intelligence and academic achievement scores of higher secondary boy students is found to be positive and statistically significant(r=0.8172, p<0.05) at significance level of 5 percent. Hence, the  $H_0$  is rejected and  $H_1$  is not rejected.

The social intelligence and academic achievement scores of higher secondary boy students are dependent on each other.



Objective 3: To study the correlation between social intelligence and academic achievement scores of higher secondary girl students.

A relationship between social intelligence and academic achievement scores of higher secondary girl students is found to be positive and statistically significant (r=0.8003, p<0.05) at significance level of 5 percent. Hence, the  $H_0$  is rejected and  $H_1$  is not rejected.





**SEPT – OCT 2023** 

**Original Research Article** 

The social intelligence and academic achievement scores of higher secondary girl students are dependent on each other.

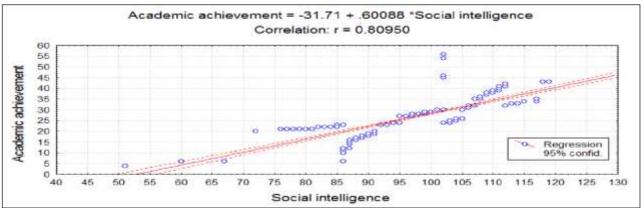
Academic achievement= -30.46 + .58604 \* Social intelligence Correlation: r = 0.80027 55 one Sheet and 50 45 Academic achievement 40 35 east man of groß 30 25 o amagaago 20 Regression 15 95% confid 10 5 0 120 60 70 80 90 100 110 130 140 150 160 170 180 Social intelligence

Graph 3: Correlation between SI and AA scores of HS girl students

Objective 4: To study the correlation between social intelligence and academic achievement scores of higher secondary Arts stream students.

A relationship between social intelligence and academic achievement scores of higher secondary Arts stream students is found to be positive and statistically significant (r=0.8095, p<0.05) at significance level of 5 percent. Hence, the  $H_0$  is rejected and  $H_1$  is not rejected.

The social intelligence and academic achievement scores of higher secondary Arts stream students are dependent on each other.



Graph 4: Correlation between SI and AA scores of HS Arts stream students

**Objective 5:** To study the correlation between social intelligence and academic achievement scores of higher secondary Science stream students.

A relationship between social intelligence and academic achievement scores of higher secondary Science stream students is found to be positive and statistically significant (r=0.8202, p<0.05) at significance level of 5 percent. Hence, the  $H_0$  is rejected and  $H_1$  is not rejected.

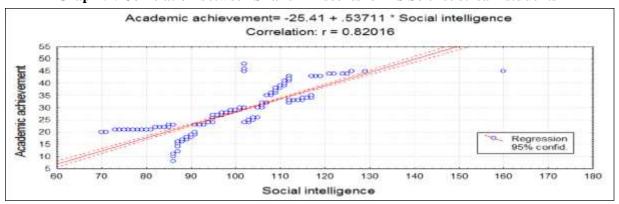




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The social intelligence and academic achievement scores of higher secondary Science stream students are dependent on each other.

Graph 5: Correlation between SI and AA scores of HS Science stream students



Objective 6: To study the correlation between social intelligence and academic achievement scores of higher secondary Commerce stream students.

A relationship between social intelligence and academic achievement scores of higher secondary Commerce stream students is found to be positive and statistically significant (r=0.8035, p<0.05) at significance level of 5 percent. Hence, the H<sub>0</sub> is rejected and H<sub>1</sub> is not rejected.

The social intelligence and academic achievement scores of higher secondary Commerce stream students are dependent on each other.

Academic achievement= -32.97 + .61088 \* Social intelligence Correlation: r = 0.8034 55 50 8 45 Academic achievement 088890 008 40 35 800800 esegananan. 30 25 0080 88888 20 Regression 15 8 10 70 75 80 85 90 95 100 105 110 115 120 125 130 Social intelligence

Graph 6: Correlation between SI and AA scores of higher secondary Commerce Students

## The results of the Correlation Coefficient between Social Intelligence and Academic Achievement:

The correlation between Social Intelligence and Academic Achievement Scores of Higher Secondary Students is found to be positively significant.

- Social Intelligence and Academic Achievements of Higher Secondary Students are dependent on each other. If SI increases, then Academic Achievement also increases.
- The Social Intelligence and Academic Achievement of Higher Secondary Boy students increases with increase in their Academic Achievement Scores.





SEPT – OCT 2023

**Original Research Article** 

- The Social Intelligence and Academic Achievement of Higher Secondary Girl students increases with increase in their Academic Achievement Scores.
- The Social Intelligence and Academic Achievement of Higher Secondary Arts Stream students increases with increase in their Academic Achievement Scores.
- The Social Intelligence and Academic Achievement of Higher Secondary Science Stream students increases with increase in their Academic Achievement Scores.
- The Social Intelligence and Academic Achievement of Higher Secondary Commerce Stream students increases with increase in their Academic Achievement Scores.

### **Conclusions:**

- 1. Social intelligence and Academic achievement are both equally essential and need to be promoted among Adolescent students through proper guidance and motivation.
- 2. It can be concluded that Social intelligence promotes Academic Achievement and vice-versa, there is a need to strengthen students potential, their capability in their respective streams –Arts Science and Commerce with a vast range of activities such as Group Discussion, Street play, Skits, healthy competitions etc can be organised.
- 3. The better performance in Academic achievement of all three streams Arts, Science and Commerce will boost their social intelligence, get motivated to cope up Academic and Social environment.

# **Research Implications:**

- 1. The policy makers should design the curriculum of the higher secondary level incorporating all those activities or practical, field works, social visits, orientation programs, interactive sessions all leading towards development of Social competencies skill development of the adolescents.
- 2. School administrators are the means and ends through which the objectives of developing social competencies are framed and executed on a long term. They need to identify the adolescents with lack of social competencies handle with proper channel and mould them towards academic success.
- **3**. Teachers need to value and boost social and emotional competencies. Adopt instructional design focusing on developing social competence.
- **4**. Teacher-Student interaction, Peer to peer interaction and conducive environment towards cultivation of social competence among higher secondary students can ensure the better academic performance.
- **5.** Interpersonal relationship between students and peers in the classroom should be strengthen. Orientation programmes, symposia etc. which help the development of optimism and confidence in Higher Secondary School students.

## **References:**

Best, J. W. and Kahn, J. V. (1998): Research in Education, New Delhi: Prentice Hall of India Pvt Ltd.

Garrett, H. E. and Woodworth, R.S. (1973): *Statistics in Psychology and Education*, Bombay: Vakils, Feffer and Simons Pvt. Ltd.

Gupta, S. P. (2011): Statistical Methods, New Delhi: S. Chand Publications.

Koul, Lokesh. (1996): Methodology of Educational Research, New Delhi: Vikas Publishing House Pvt Ltd.





**SEPT – OCT 20**2

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Goleman, Daniel. (2006): Social Intelligence: The New Science of Human Relationships, New York: Random House Publishing Group.

Patel, R. N. (2001): Educational Evaluation, New Delhi: Vikas Publishing House Pvt. Ltd.

Gardner, Howard. (1983; 1993): Frames of Mind: The theory of multiple intelligences, New York: Basic Books. **Journals:** 

- Sinha, N.C.P.,(1967). A study of intelligence and some Personality Factors in relation to Academic Achievement of School Student, Ph.D.Psy, Magadh.U. M.B. Buch: II Survey of Research in Education, Vol I
- Sharma. S., (1982)A study of Intellectual Factors and Academic Achievement in Arts Science and Commerce Courses at Higher Secondary Stage, Ph.D.Edu., AMU.M.B Buch III Survey of Research in Education Vol II
- 3. Dr. Sumanlata Saxena, \*\* Dr. Rajat Kumar Jain(2013). Social Intelligence of Undergraduate Students In Relation To Their Gender and Subject Stream, IOSR Journal of Research & Method in Education (IOSR-JRME) Volume 1, Issue 1, PP 01-04
- 4. Sreeja.P, and Mrs. Nalinilatha. M. (2017). "A study on relationship between social intelligence and academic achievement of higher secondary students." International Journal of Research *Granthaalayah*, 5(6), 476-488.
- 5. Dhana Baggiyam, and Mrs. Pankajam. R.(2017). Social Intelligence in relation to Academic Achievement. International Journal of Research Granthaalayah, 5(3) SE, 18-22,
- 6. P.Suresh Prabu (2015) A Study on Social Intelligence among Arts and Science college students .Scholarly Research Journal for Humanity Science and English language, vol-ii, issue-vii

# Webiliography:

http://www.macrothink.org/journal/index.php/ije/article/view/2378 http://shodhganga.inflibnet.ac.in/bitstream/10603/114076/14/14\_bibliography http://www.researchgate.net/publication

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