STUDY OF ACADEMIC ACHIEVEMENT OF ADOLESCENTS BELONGING TO DIFFERENT SOCIOMETRIC GROUPS

Dr. Renu Gupta[*]
Subita Sharma[**]

ABSTRACT

Achievement and excellence are the watchwords of modern human society. The three fundamental tracts of a good student are intelligence, good behavior and academic success. The term Academic has been derived from word academy. The meaning of academy is a school where special types of instructions are imparted. Achievement synonymies with the accomplishment or proficiency of performance in given skills or body of knowledge. Academic achievement refers to the level of success or proficiency attained in some specific area concerning scholastic or academic work. No matter what else schools find themselves doing, promoting academic achievement is among their primary functions. The word 'sociometry' comes from the Latin "socius" meaning social and the Latin "metrum", meaning measure. As these roots imply, sociometry is a way of measuring the degree of relatedness among people.. According to **Sharma (1970),** *on the basis of sociometric analysis, students can be classified into six categories i.e. Populars (stars), above average, below average, neglectee, rejectee and isolates based on sociometric score they received. The present study will be carried out with the objective to know about the academic achievement of different sociometric groups. A sample of 120 students both male and female from private and govt. schools of Kathua district will be selected.*

KEYWORDS: *Academic Achievement, Sociometric, Adolescents, Intelligence, Community Factors.*

―――――――――

Introduction

Some students fare better than others, even with similar family background, school curriculum, and teacher quality. Variance in academic performance that persists when situational variables are held constant suggests that whether students fail or thrive depends not only on circumstance, but also on relatively stable individual differences in how children respond to circumstance. Academically more talented children, generally outperform their less able peers. Indeed, general intelligence, defined as the "ability to understand complex ideas, to adapt effectively to the environment, to learn from experience, to engage in various forms of reasoning, to overcome obstacles by taking thought" (Neisser *et al.*, 1996, p. 77) has a monotonic, positive relationship with academic performance, even at the extreme right-tail of the population (Gottfredson, 2004; Lubinski, 2009). Much less is known about how traits unrelated to general intelligence influence academic outcomes.

Achievement of Adolescent

It is every parents desire to ensure that their children perform well in school so that they can pursue a successful career later in life. Every child is different and there will always be some who learn at a much quicker pace than other and it is because of different factors like, Individual factors, family factors, peer factors, school factors and community factors.

―――――――――――――

[*]   Kamla Nehru Mahavidyalaya, Kamla Nagar, Bhopal, M.P., India.
[**]   Research Scholar, Barkatullah University, Bhopal, M.P., India.

Academic achievement of adolescents also depends upon their behavior. Behavior problem in school, starts in elementary grades and associated with low academic achievement eg:- Adolescents who are highly aggressive in childhood are less likely to graduate from high school. Adolescents who are hyperactive also have problems in school. At the age of 17 and 18 they are more likely than other children to either achieve poorly, attending a special school, or dropped out altogether. **(Geary 2004)**

Academic achievement is commonly measured by examinations or continuous assessment but there is no general agreement on how it is best tested or which aspects are most important procedural knowledge such as skills or declarative knowledge such as facts. **Chapin (1940),** defined sociometrics as the study and use of social measurements into three categories; (i) Psychological measurements (Psychometrics measurement), (ii) Measurement of large units of population, and (iii) Sociometrics including scales to measure the interaction process within group and those that attempt to measure the family group and the home environment. He described 'sociometry' as 'procedure' that attempts to measure informal friendship constellations and seems to get the latest cultural patterns of a group of people.

There is a specialized terminology associated with sociometric test. Most of it was coined by Moreno (1953), the founder of sociometry and is unique sociometric measurement. According to Sharma (1970), on the basis of sociometric analysis, students can be classified into seven categories i.e. Popular (stars), above average, average, below average, neglected, rejecter and isolates based on sociometric score they received. Sociometric technique has great use in school situation. It helps us to create or locate the most social and also socially isolated adolescents who are rejected by the group. This knowledge helps us in assessing the effects of being neglected or rejected on the temperament and academic achievements and also provides remedial measures to the neglected and rejected and for arranging better group cohesive situations. The teacher can learn much about the social development of adolescent by knowing the friends he has and his capacities for forming friendship. It gives an insight into the child's development among the adolescents. The teacher, by making study of social and economic forces acting on them, may be able to understand the causes for their social acceptance or rejection. This will help him in understanding the social life of his pupils. The sociometric technique gives an idea of likes and dislikes of students. It also shows the formation of groups and cliques in classroom.

In the state of Jammu and Kashmir education level has qualitatively and quantitatively gone up during the last 2 decades. Every year new private and govt. school are being opened. In the urban centers, private schools are more than the govt. schools while in the rural area, govt. schools outnumber the private schools. It is generally observed that the students of private urban schools are more active, talented and creative academically than their rural counterparts. In the view of this, the present investigation was undertaken to study sociometric group and academic achievement of adolescents studying in various schools of different localities with the following objectives.

Objectives of the Study

- To study academic achievement of adolescents in district Kathua
- To study different sociometric group of adolescents (average, above average, below average, popular, isolated, rejected, and neglected) in different schools
- To study whether there is any effect of sociometric group on academic achievement of adolescents.

Review of Literature

Chamundeswari et al. (2006) studied general mental alertness and intelligence in relation to academic achievement of students at the secondary level with the objective to investigate the possible differences between academic achievement in Mathematics of students at secondary level in different types of school by taking a sample of 291 students and found that there was a significant difference between achievement in Mathematics of students at secondary level in government aided, and corporation schools; there was no significant difference between achievement in Mathematics of students at the secondary level in corporation and government, corporation and government aided, schools; there was significant correlation between mental alertness, intelligence, achievement in Mathematics and English of students at the secondary level in different types of school.

Paltasingh (2008) studied relationship among creativity, intelligence and achievement scores of secondary school students with the objective to study the correlation between creativity and intelligence; intelligence and science achievement; intelligence and scholastic achievement by taking a sample of 180 students of IX class from Oriya medium secondary school. Random sampling technique was used to

collect the data and found that there was significant positive correlation among creativity and science achievement, creativity and scholastic achievement, intelligence and science achievement as well as intelligence and scholastic achievement.

Kumari (2010) studied correlates of academic achievement of secondary school students with the objective to study the relationship of academic anxiety and achievement motivation with academic achievement, and to find out the interaction effect of academic anxiety, achievement motivation and gender on academic achievement by taking a sample of 400 students of IXth class through stratified sampling technique and found that academic achievement was negatively related to academic anxiety and positively to achievement motivation; the interaction of academic anxiety and achievement motivation on academic achievement was not significantly different for boys and girls; the interaction effect of gender and academic anxiety on academic achievement did not differ significantly for different levels of achievement motivation; the interaction effect of gender and achievement motivation on academic achievement did not differ significantly among different levels of academic anxiety.

Annu (2014) conducted a study " A comparative study of academic achievement of popular, neglected and rejected students studying in X class" with the objective to study and compare the significance of differences of mean scores on academic achievement between popular and neglected ; popular and rejected ; neglected and rejected socio- metric groups of students. Sample was consisted of 500 students from various schools selected randomly, out of which 120 students picked on the basis of fixed criteria (popular:40, neglected:40, rejected:40,) comprising of equal number of boys and girls from each sociomertric category. Each section of the class was treated as one group for the study**.** Results highlighted that the popular students depicts higher academic achievement than neglected and rejected counterparts. Results further highlighted that neglected students depicts higher achievement than rejected counterparts.

Devi (2014) conducted a study on "Academic Achievement of X Class Students Belonging to Different Sociometric Group". The objective of the study was to study and compare the significance of differences of means scores on "Academic Achievements" among the different sociometric groups of students. A sample of 500 students from Kathua district was selected with the help of random sampling technique ,out of which 120 students picked on the basis of fixed criteria (popular:30, neglected:30, rejected:30, isolated:30) comprising of equal number of boys and girls from each sociomertric category. Mean, standard deviation and critical ratio was the statistical techniques to be employed. Results revealed that popular students depict higher academic achievement than rejected and isolated students. Results further revealed that neglected, rejected and isolated students were found to be alike in academic achievement. Rejected students were also found to have higher academic achievement level.

Sambyal (2014) conducted a Study on academic achievement of rejected and isolated students with the objective to study to compare the significance of differences of mean scores on academic achievement between rejected and isolated sociometric groups of students. A sample of 500 students of 10th class were randomly selected from Kathua district of Jammu and Kashmir, out of which 100 students were picked on the basis of fixed sociometric criteria (Rejected: 50; isolate: 50) comprising of an equal number of boys and girls from each sociometric category. Mean.S.D. and C.R statistical techniques was employed for study. Results showed that Isolated students have higher level of academic achievement than rejected counterparts. Significant difference was also found between rejected and isolated students.

Definitions of the Terms Used

- **Sociometric Questionnaire:** It is a set of questions which is given to students of a class to know whom they prefer the most/least in the class. It is used for identifying various sociometric groups of students. Seven categories of the students viz; Popular, above average, average, below average, neglected, rejected and isolate can be identified with the help of this questionnaire. In the present investigation, the researcher will use sociometric questionnaire (SMQ) prepared by Dr. A.N. Sharma (1970) in order to identify popular, above average, average, below average, neglected, rejected and isolated groups of the students.

- **Sociometric Score:** The number of choices………, likes and dislikes ….. obtained by an individual on a sociometric questionnaire is referred to as his sociometric score. On the basis of the sociometric score, an individual can be identified to which sociometric category he actually belongs to. The sociometric scores of all students in a class help us to categorise the students into respective sociometric categories.

- **Sociometric Categories:** The choices received by a student are obtained by counting each entry made in each student's vertical column as one, regardless of whether the choice is given as 1, 2 or 3. These totals are entered in the row labeled "Totals on Each Criterion" at the bottom of the matrix table. Summing up three totals in each, column, the overall ' 'sociometric status score' is obtained. On the basis of sociometric status score, the students can then be classified into different sociometric categories- Populars, Above average, Average, Below average, Neglectee, Rejectee and isolate. The present study will be based to study popular, above average, average, below average, neglected, rejected and isolated groups of students.

- **Adolescence Stage:** The word 'adolescence' comes from the Latin word '*adolescere'* which means 'to grow'. So the essence of the word adolescence is growth and it is in this sense that adolescence represents a period of intensive growth and change in nearly all aspects of a child's physical, mental, social and emotional life. Adolescence has been described by Stanley Hall as 'the period of storm and stress of human life'. According to **"Ross"** adolescent is a very crucial period of one's life which covers the age from 12-18 years. The most important fact about adolescence is that it is a period of transition from childhood to adulthood. Transition from one period to another always is associated with some problems. Adolescence is not an exception and it is also associated with some problems.

- **Academic Achievement:** In the present study, the percentages of marks of class X students in their annual examinations of previous class IX will be taken as an index of the academic achievement.

Study Sites

The state of Jammu and Kashmir spreads over an area of 26,293 km^2 (10,152 sq mi) sq. km. The state is predominantly hilly and mountainous. Administratively the state has been divided into 3 divisions, Jammu, Kashmir and Ladakh. The state consists of 22 districts, out of which '1 district namely Kathua was slected from Jammu division for our study as this district have an extensive network of Govt. and Private schools at primary, middle and secondary levels.

Research Methodology

A list of co-educational schools of district Kathua was prepared. The students were picked up from selected schools by using three choice sociometric questionnaire prepared by Dr. A. N. Sharma based on Bronfenbrenner's fixed frame of reference. The sample was studied for various sociometric classes and academic achievement

Variables of the Study

- **Independent Variables**
  The independent variables for the study will be (a) gender, (b) locality.
- **Dependent Variables**
  Academic achievement

Population

The target population for the study was students of class X of various schools of district Kathua.

Sampling

The sample of the present study comprised of 120 adolescents studying in class X of various schools located in different localities (Private schools: 60; Govt. schools: 60) comprising of equal no boys and girls was picked up randomly.

Figure 1: Diagrammatically Representation of the Sample Used
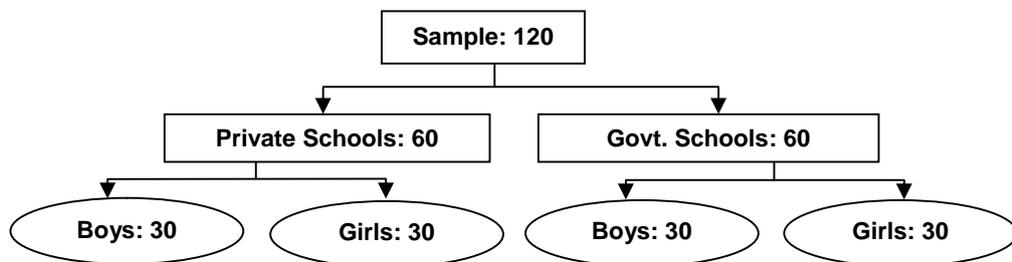
Description of Tools

- **Sociometric Questionnaire**

    In the present study, sociometric Questionnaire prepared by Dr. A. N. Sharma was used to identify different sociometric groups of students.

- **Academic Achievement**

    Academic achievement score %age mark of previous one year result of students was used as academic achievement of students.

Table 1: Sociometric Groups and Academic Achievement of Adolescents of Shiva Public Higher Secondary School Kathua

S. No.	Sociometric Group (Boys)	Academic Achievement (%) (Boys)	Sociometric Group (Girls)	Academic Achievement (%) (Girls)
1	Popular	97.8%	Above Average	98%
2	Above Average	95%	Above Average	97.6%
3	Popular	87.7%	Above Average	94%
4	Popular	82.5%	Popular	93.6%
5	Popular	77,5%	Below Average	89%
6	Above Average	74%	Popular	87.4%
7	Above Average	72.6%	Average	86%
8	Below Average	70%	Below Average	85.7%
9	Above Average	67%	Above Average	83%
10	Below Average	66.6%	Isolated	81%
11	Above Average	66.5%	Popular	80.6%
12	Average	66.3%	Above Average	78.9%
13	Popular	66%	Above Average	78%
14	Above Average	65.7%	Rejected	77%
15	Below Average	65%	Above Average	73%
16	Popular	65%	Below Average	72.3%
17	Isolated	64%	Average	70.5%
18	Below Average	62.5%	Neglected	69%
19	Average	62%	Isolated	68%
20	Neglected	61.9%	Above Average	67.2%
21	Isolated	60%	Rejected	67%
22	Neglected	58.6%	Isolated	65.9%
23	Below Average	58%	Above Average	64%
24	Average	57.7%	Average	63%
25	Average	57%	Average	61.7%
26	Below Average	55.2%	Below Average	61%
27	Below Average	55%	Above Average	59%
28	Neglected	52%	Average	57.6%
29	Average	50.4%	Rejected	54%
30	Below Average	48%	Average	52%

Table 2: Sociometric Groups and Academic Achievement of Adolescent of Govt. H.S.S Kathua

S. No.	Sociometric Group (Boys)	Academic Achievement (%) (Boys)	Sociometric Group (Girls)	Academic Achievement (%) (Girls)
1	Above Average	82%	Above Average	92%
2	Above Average	80.4%	Below Average	90%
3	Popular	79%	Above Average	87%
4	Popular	77.8%	Above Average	85.3%
5	Above Average	75%	Below Average	82%
6	Rejected	73%	Popular	81.9%
7	Above Average	69%	Below Average	79%
8	Above Average	67%	Isolated	75%
9	Isolated	64.7%	Popular	73.6%
10	Average	63%	Below Average	70%
11	Above Average	61.8%	Neglected	67%
12	Below Average	60%	Isolated	64.3%

13	Rejected	59.4%	Above Average	62%
14	Below Average	58.8%	Average	61.9%
15	Below Average	58%	Above Average	61%
16	Below Average	56.7%	Isolated	60.6%
17	Above Average	55%	Neglected	60.3%
18	Rejected	54.8%	Above Average	60%
19	Below Average	54.3%	Isolated	59.7%
20	Below Average	54%	Above Average	59.5%
21	Above Average	54%	Rejected	59.3%
22	Below Average	53%	Rejected	59%
23	Rejected	52%	Average	57.9%
24	Average	51.2%	Below Average	57%
25	Below Average	50.5%	Neglected	54%
26	Isolated	49%	Isolated	55.2%
27	Neglected	48.6%	Below Average	54%
28	Rejected	47%	Below Average	52.5%
29	Above Average	46.3%	Average	51%
30	Below Average	45.9%	Below Average	49.5%

Interpretation of Data and Discussion

Analysis of the data is the most important part in any research work. It means studying the tabulated material in order to determine inherent facts or meanings. Raw scores do not reveal anything. These are quantitative expression of physical and psychological observations. One can draw proper inferences only after analyzing the data carefully. The data obtained by administering sociometric scale on the boys and girls studying in X of various schools located in urban and rural localities and previous year %age of marks is taken to get academic achievement scores. The data collected for the present study has been analyzed under the following headings.

Table 1 shows that majority (26.6%) of boys fall in below average sociometric group, on the other hand13.3% of girls fall in below average group. Equal no of boys i.e. 20% fall in popular and above average group. Whereas only 10% of girls fall in popular sociometric group and majority 33.3% fall in above average group. The study shows that 16.6% boys and 20% girls fall in average sociometric group. 6.6% of boys fall in isolated sociometric group and 10% in neglected. In case of girls it was 10% in isolated and 3.3 in neglected. No boy fall in rejected group but girls are 10%. Further it was found that popular and above average sociometric groups was academically higher than the other sociometric group both in case of boys and girls.

From table 2 it is found that in case of Govt. schools equal no of boys i.e.30% fall in above average and below average group, on the other side majority (26.6%) of girls fall in below average sociometric group and 23.3% in above average. Equal no of population i.e.6,6% fall in popular sociometric group in both boys and girls. While only 6.6% boys fall in isolated group and in case of girls it is 16.6%. Further it was found that 16.6% of boys and 6.6% girls fall in rejected group. In case of neglected sociometric group it was 3.3% in boys and 10% in girls.

The study shows that the above average sociometric group was academically higher than the other groups both in case of boys and girls, while popular group stands academically on second no in both cases and rest in mix ratio.

Conclusion

The present study on about Academic achievement of adolescents belonging to different sociometric groups has been conduct in district Kathua. The study was based on sample of 120 adolescents of class X (both boys and girls) from govt. and private schools of Kathua district. Sociometric scale by A.N Sharma was used for the collection of data about sociometric groups and previous yr marks % was used for academically achievement of students. The study reveals that in case of private schools majority of boys (26.6%) fall in below average group, on the other side majority of girls i.e. 33.3% falls in above average group. In govt. schools majority of boys (30%) falls in above average and again 30% in below average sociometric group but in case of girls' majority (26.6%) fall in below average group. Further it is found that adolescents of above average and popular sociometric groups are academically higher than others in all cases.

References

➢ Annu. (2014). A comparative study of academic achievement of popular, neglected and rejected students studying in X class. Unpublished M.Ed dissertation, IGNOU regional centre, Jammu.

➢ Chapin. (1940) Trends in Sociometrics and Critique. Retrieved from htt://Shodhganga.infliebnet.ac.in.

➢ Chittaranjan, N. (2002). Academic Achievement of Secondary School Students in Relation to Their Intelligence and Attitude towards Schooling Process. Published phd thesis .Retrieved from http:// shodhganga.infliebnet.ac.in.

➢ Devi, R. (2014). Academic Achievement of X Class Students Belonging to Different Sociometric Group. Unpublished M.Ed dissertation, IGNOU regional centre,Jammu.

➢ Geary. (2004) Home environment and academic performance Retrieved from http:// shodhganga.infliebnet.ac.in.

➢ Gottfredson, L. S. (2004). Schools and the g factor. Retrieved from https://my.vanderbilt.edu.

➢ Neisser. (1996) Intelligence: Knowns and unknowns. Retrieved from https://books.google.co.in

➢ Sambyal, M. (2014). A Study of academic achievement of rejected and isolated students. Unpublished M.Ed dissertation,IGNOU regional centre,Jammu.

➢ Singh, P. (2008). Relationship among creativity, intelligence and achievement scores of secondary school students. Retrieved from http:// shodhganga.infliebnet.ac.in.

♦□♦