

Concentration, Memory and Gender – A Case Study on High School Students

Sankara Pitchaiah Podila

Psychologist and Professor of Geology, Acharya Nagarjuna University, Andhra Pradesh, India

Corresponding Author email- lifeskillssankar@gmail.com

ABSTRACT

Concentration and memory are considered as sisters. Without classroom concentration, students cannot memorize the subject matter. Even a student has a good concentration, without memory it may not be useful. The present study was observed the level of concentration and memory in 8th to 10th studying high school students. A total of 2132, students from 9 High schools were selected for the study. Out of them, 1352 are male and 780 are female. Using simple questions, student's response was taken. The study revealed that high percent of male students expressed concentration and memory problem compared to female students.

Keywords : Concentration, Memory, Gender, High School Students.

I. INTRODUCTION

The academic success of student dependents mainly on the Level of concentration in the classroom and memory.

Mehralizadeh et al., (2013) studied about the factors affecting student's concentration in the classroom. Lamba et al., (2014) observed the impact of teaching time on attention and concentration and found that 46% students had average concentration and 10% had poor concentration. The study made by Attia et al., (2017) revealed the effect of technology on the student's concentration. Learning assessment and neurocare center had suggested some management techniques to eliminate concentration difficulties (<https://www.lanc.org.uk>). Gaines (2001) reported the various factors that affect retention in the classroom. In a study, how technology was warping our memory is explained (<https://www.huffingtonpost.in>).

In the present study concentration and memory of High school students was observed with reference to the gender.

II. METHODOLOGY

Nine High schools located in and around Guntur, Andhra Pradesh, India were selected for

the study. 8th to 10th class students were chosen as subjects. A total of 2132, students from 9 High schools were selected for the study. Out of them, 1352 are male and 780 are female (Tables 1 and 2). The response was taken for two questions i.e.

1. How much percent of time concentrate in the classroom (<50% are >50%)? and
2. Are you able to recall and produce the prepared subject matter at least 75% in the examination?

The response was analyzed using statistical analysis. School wise percent variation of concentration and memory was studied in relation to male and female students.

TABLE 1
SCHOOL WISE AND GENDER WISE STUDENTS
STRENGTH

Schools	Male	Female	Total
SK	329	198	527
SKS	168	143	311
P	194	58	252
KSR	120	70	190
SCMP	141	104	245
CH	46	25	71
MD	42	9	51

NC	203	86	289
KP	109	87	196
Total	1352	780	2132

SK- Smt. Kasturiba; SKS- Smt. Kasu Sayamma; P- Pattabhipuram; KSR- Kaveti Sankar Rao; SCMP- Smt. Chebrolu Mahalakshmi Pullaiah; CH-Chinmaya; MD-Margadarsi; NC-Namburu Coed; KP- Koppuravuru

TABLE 2
SCHOOL WISE AND GENDER WISE STUDENT'S WITH CONCENTRATION AND MEMORY
PROBLEM

Schools	Concentration			Memory		
	Male	Female	Total	Male	Female	Total
SK	191	66	257	195	133	328
SKS	55	29	84	78	82	160
P	144	34	178	138	39	177
KSR	37	16	53	69	62	131
SCMP	55	30	85	80	71	151
CH	28	16	44	26	10	36
MD	26	4	30	19	4	23
NC	86	24	110	103	42	145
KP	58	35	93	84	53	137
Total	680	254	934	792	496	1288

III. RESULTS AND DISCUSSION

The percent variation was presented in Table 3 and Figures 1 to 6.

TABLE 3
GENDER WISE STUDENTS WITH
CONCENTRATION AND MEMORY PROBLEM (%)

Schools	Concentration		Memory	
	Male	Female	Male	Female
SK	58.05	33.33	59.27	67.17
SKS	32.74	20.28	46.43	57.34

P	74.23	58.62	71.13	67.24
KSR	30.83	22.86	57.50	88.57
SCMP	39.01	28.85	56.74	68.27
CH	60.87	64.00	56.52	40.00
MD	61.90	44.44	45.24	44.44
NC	42.36	27.91	50.74	48.84
KP	53.21	40.23	77.06	60.92

Concentration

Male

High percentage of P school students (74.23) expressed Concentration problem, i.e., they are

unable to concentrate in the classroom (figure 1), followed by MD (61.90) and CH (60.87). Comparatively the problem is low in KSR school students (30.83%).

Female

64.00% of CH school students marked concentration problem (figure 2), followed by P (58.62%) and MD (44.44%). The lowest percentage is observed with SKS (20.28%).

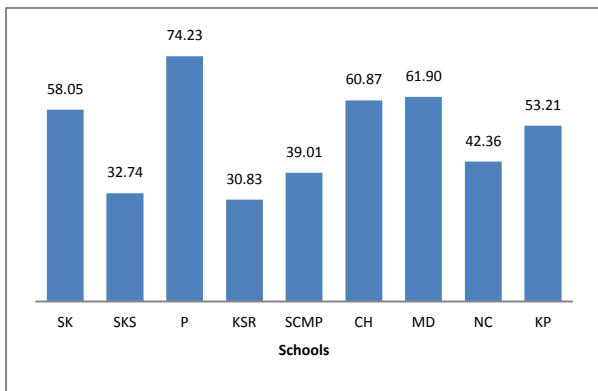


Figure 1 School wise male students with concentration problem (%)

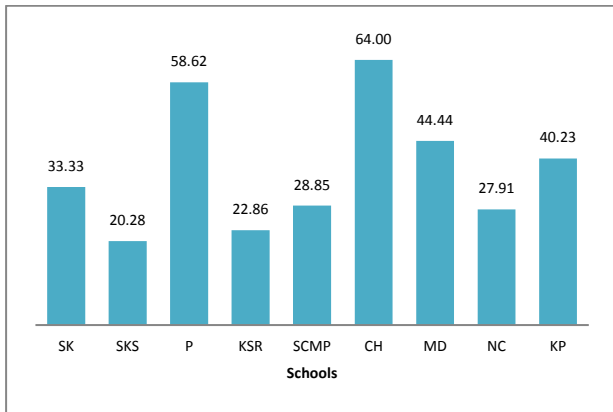


Figure 2 School wise female students with concentration problem (%)

Comparative Study

74.23% of P school male students expressed concentration problem, compared to 58.62% of the female (Table 3 and Figure 3). In case of female

students, 64.00% of CH students expressed poor concentration compared to 60.87% of male students.

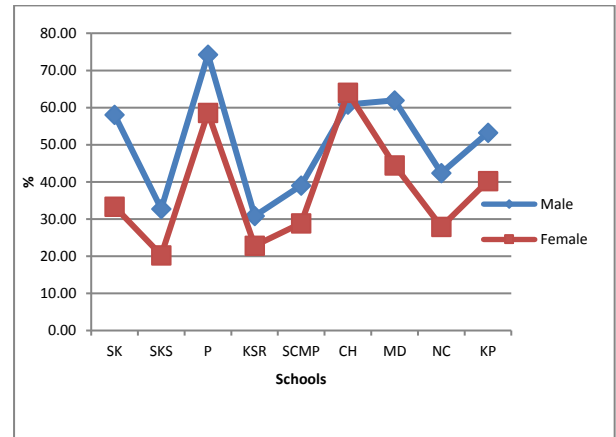


Figure 3 Comparison between male and female students

Memory

Male

The highest percentage of KP school students (77.06) marked memory problem, i.e., that they are unable to recall the subject (figure 4), followed by P (71.13) and SK (59.27). The lowest problem is observed with MD school students (45.24%).

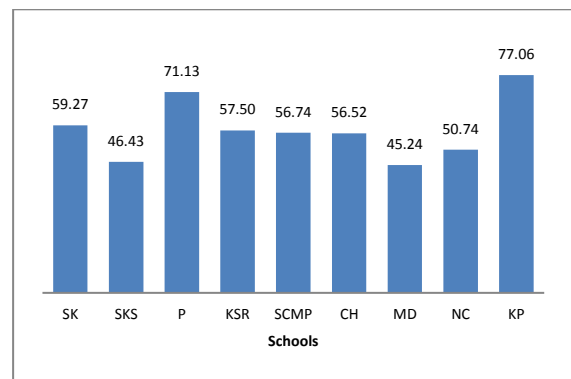


Figure 4 School wise male students with memory problem (%)

Female

88.57% of KSR school students marked the problem (Figure 5), followed by SCMP (68.27%) and P

(67.24%). The problem is low in CH school students (40.00%).

Comparative Study

77.06% of KP school students of male expressed memory problem, compared to 60.92% of female (Table 3 and Figure 6). In case of female students, 88.57% of KSR students expressed poor concentration compared to 57.50% of male students.

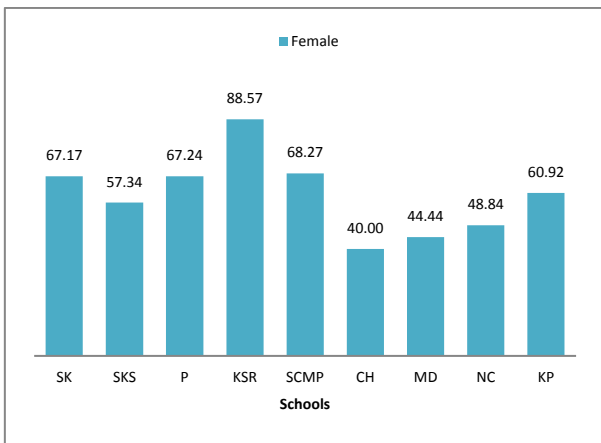


Figure 5 School wise female students with memory problem (%)

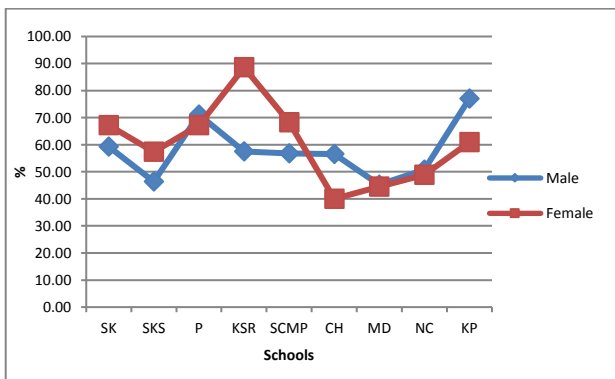


Figure 6 Comparison between male and female students

On average, girls are more motivated than boys to perform well in school, at least during elementary school. By the time girls reach high school, however, some may try to downplay their own academic ability in order make themselves more likeable by

both sexes (Davies, 2005). Girls earn slightly higher average grades, than boys (Freeman, 2004). Males are better at spatial tasks involving mental rotation, whereas females have superior skills (<https://www.memory-key.com>).

Psychologists determine significant sex differences in episodic memory, a type of long-term memory based on personal experiences, favoring women (<https://www.science daily.com>).

Past research suggests that males and females differ in memory associated with gender stereotyped objects. Specific findings, however, have been inconclusive with regards to the specifics of these differences. Baer et al., (2006) found that females recalled more items overall and performed better at recalling gender neutral and female stereotyped items. Gabriel and Sridevi (2016) revealed that short term memory showed statistically significant increase in females compared to males. A profile of normal variations in patterns of memory test performance across gender revealing relative strengths for females on verbal tasks and males on spatial tasks (Lowe et al., 2003).

The study found that concentration and memory are two important aspects. Each and every student shall have knowledge about improving techniques. Out of the total 1352 males, 50.29% expressed concentration problem and 58.57% recall problem against 32.56 and 63.59% females respectively.

IV. CONCLUSION

Concentration and memory are two important aspects in a student’s life. Each and every student shall have knowledge about improving their techniques. Out of the total 1352 males, 680 expressed concentration problem (50.29%) and 792 recall problem (58.57%) against 254 (32.56%) and 496

(63.59%) females respectively. The study found that the number of males have concentration problem than females and comparatively, more females have a recall problem than males.

V. ACKNOWLEDGMENT

Authors are thankful to Rotary club – Adharsh, Guntur Commissioner, the GMC and the Authorities of Acharya Nagarjuna University for their encouragement.

VI. REFERENCES

- [1]. Attia Najya A., Lubna Baig, Yousef I. Marzouk, Anwar Khan (2017) The potential effect of technology and distractions on undergraduate students' concentration, *Pak J Med Sci.* 2017;33(4):860-865.
- [2]. Baer, April; Trumpeter, Nevelyn N.; and Weathington, Bart L. (2006) "Gender differences in memory recall," *Modern Psychological Studies: Vol. 12 : No. 1 , Article 3.*
- [3]. Davies, J. (2005). Expressions of gender: An analysis of pupils' gendered discourse styles in small group classroom discussions. *Discourse and Society*, 14(2), 115–132.
- [4]. Freeman, D. (2004). Trends in educational equity of girls and women. Washington, D.C.: United States Department of Education, National Center for Educational Statistics.
- [5]. Gabriel Selwin and Sridevi, G. (2016) Gender Differences In Short Term Memory And Perception, *International Journal of Development Research* Vol. 06, Issue, 07, pp.8478-8480.
- [6]. Gaines Marcellious (2001) What Factors Effect Retention in the Classroom? Wakefield High School Arlington County (VA) Public Schools.
- [7]. Lamba Sonika, Ms. Archana Rawat, Ms. Jerry Jacob, Ms. Meena Arya, Mr. Jagbeer Rawat, Mrs. Vandana Chauhan, Ms. Sucheta Panchal (2014) Impact of Teaching Time on Attention and Concentration, *IOSR Journal of Nursing and Health Science*, Volume 3, Issue 4 Ver. I, PP 01-04.
- [8]. Lowea Patricia A., Mayfieldb Joan W., Reynolds Cecil R. (2003) Gender differences in memory test performance among children and adolescents, *Archives of Clinical Neuropsychology* 18, 865–878.
- [9]. Mehralizadeh Samira, Raheb Ghorbani , Sheida Zolfaghari , Hamid Shahinfar , Ronaz Nikkhah, Mohsen Pourazizi (2013) Factors Affecting Student Concentration in Classroom: Medical Students' Viewpoints in Semnan University of Medical Sciences, *Iranian Journal of Medical Education*, 13(8): 663-671.
- [10]. <https://www.memory-key.com/memory/individual/gender>
- [11]. <https://www.sciencedaily.com/releases/2008/02/080220104244.htm>
- [12]. <https://www.lanc.org.uk/wp-content/uploads/2011/08/Classroom-Management-Techniques-for-Concentration-Difficulties.pdf>
- [13]. https://www.huffingtonpost.in/entry/technology-changes-memory_us_4414778

Cite this article as :

Sankara Pitchaiah Podila, "Concentration, Memory and Gender - A Case Study on High School Students", *International Journal of Scientific Research in Science and Technology (IJSRST)*, Online ISSN : 2395-602X, Print ISSN : 2395-6011, Volume 6 Issue 2, pp. 756-760, March-April 2019. Available at doi : <https://doi.org/10.32628/IJSRST1962161>
Journal URL : <http://ijsrst.com/IJSRST1962161>