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

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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.

II. METHODOLOGY

Nine High schools located in and around Guntur, Andhra Pradesh, India were selected for the study. 8th to 0th 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

<table>
<thead>
<tr>
<th>Schools</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SK</td>
<td>329</td>
<td>198</td>
<td>527</td>
</tr>
<tr>
<td>SKS</td>
<td>168</td>
<td>143</td>
<td>311</td>
</tr>
<tr>
<td>P</td>
<td>194</td>
<td>58</td>
<td>252</td>
</tr>
<tr>
<td>KSR</td>
<td>120</td>
<td>70</td>
<td>190</td>
</tr>
<tr>
<td>SCMP</td>
<td>141</td>
<td>104</td>
<td>245</td>
</tr>
<tr>
<td>CH</td>
<td>46</td>
<td>25</td>
<td>71</td>
</tr>
<tr>
<td>MD</td>
<td>42</td>
<td>9</td>
<td>51</td>
</tr>
</tbody>
</table>

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

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

### 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 (%)

<table>
<thead>
<tr>
<th>Schools</th>
<th>Concentration Male</th>
<th>Female</th>
<th>Memory Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>SK</td>
<td>58.05</td>
<td>33.33</td>
<td>59.27</td>
<td>67.17</td>
</tr>
<tr>
<td>SKS</td>
<td>32.74</td>
<td>20.28</td>
<td>46.43</td>
<td>57.34</td>
</tr>
</tbody>
</table>

**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](image1.png)  
**Figure 1** School wise male students with concentration problem (%)

![Figure 2](image2.png)  
**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](image3.png)  
**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](image4.png)  
**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 (%)](image)

![Figure 6 Comparison between male and female students](image)

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 (Lowea 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

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