RESULTS

The present experiment was designed to study reminiscence in children as a function of personality, drive, age and sex. Two psychomotor tasks Substitution and Backward Figure Writing were used as measures of reminiscence. On each task the subject was given 5 one-minute pre-rest trials followed by one minute rest and then 2 post-rest trials of one-minute each. Reminiscence scores were obtained by subtracting scores on the last pre-rest trial from scores on the first post-rest trial (Appendix). The experiment used two four-way factorial designs. In design (I) two levels of Extraversion with controlled Neuroticism, two levels of drive, three levels of age and two sexes (2x2x3x2 = 24) yielding 24 conditions with 10 subjects in each condition (Extraversion Group). In design (II) two levels of Neuroticism with controlled Extraversion, two levels of drive, three levels of age and two sexes (2x2x3x2 = 24) yielding 24 conditions with 10 subjects in each condition (Neuroticism Group). The analyses of reminiscence scores was done separately for the Extraversion and Neuroticism groups.

Extraversion Group

Means, SDs of reminiscence scores on the Substitution and Backward Figure Writing tasks of personality, drive, age and sex groups are shown in Table 2. These means have also been diagramatically presented in Figures I to IV.
**Table 2 (Extraversion Group)**

**Means and SDs of Reminiscence Scores on the Substitution and Backward Figure Writing Tasks**

<table>
<thead>
<tr>
<th></th>
<th>Substitution</th>
<th></th>
<th>Backward Figure Writing</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td></td>
<td>M</td>
</tr>
<tr>
<td><strong>Personality</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E^+</td>
<td>5.84</td>
<td>3.99</td>
<td></td>
<td>8.06</td>
</tr>
<tr>
<td>E^-</td>
<td>5.39</td>
<td>5.05</td>
<td></td>
<td>6.23</td>
</tr>
<tr>
<td><strong>Drive</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>D_1</td>
<td>6.05</td>
<td>4.60</td>
<td></td>
<td>7.84</td>
</tr>
<tr>
<td>D_2</td>
<td>5.10</td>
<td>4.46</td>
<td></td>
<td>6.45</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A_1</td>
<td>5.22</td>
<td>3.75</td>
<td></td>
<td>7.90</td>
</tr>
<tr>
<td>A_2</td>
<td>5.41</td>
<td>5.13</td>
<td></td>
<td>7.30</td>
</tr>
<tr>
<td>A_3</td>
<td>6.06</td>
<td>4.67</td>
<td></td>
<td>6.24</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S_1</td>
<td>5.69</td>
<td>4.84</td>
<td></td>
<td>7.72</td>
</tr>
<tr>
<td>S_2</td>
<td>5.44</td>
<td>4.26</td>
<td></td>
<td>6.57</td>
</tr>
</tbody>
</table>

**Symbols**
- E^+ = High on Extraversion;
- E^- = Low on Extraversion;
- D_1 = High Drive;
- D_2 = Low Drive;
- A_1 = 10 year age group;
- A_2 = 12 year age group;
- A_3 = 14 year age group;
- S_1 = Boys;
- S_2 = Girls;
FIG. 1

EXTRAVERSION AND REMINISCENCE (EXTRAVERSION GROUP)

SCALE
1 LARGE SQ. = 1

E+ = HIGH ON EXTRAVERSION
E- = LOW ON EXTRAVERSION
SUBSTITUTION
BACKWARD FIGURE WRITING

MEAN REMINISCENCE SCORES

0 1 2 3 4 5 6 7 8 9
FIG II

DRIVE AND REMINISCENCE
(EXTRAVERSION GROUP)

SCALE
1 LARGE SQ.=1

D1 - HIGH DRIVE
D2 - LOW DRIVE

□ SUBSTITUTION

onenumber BACKWARD FIGURE WRITING

MEAN REMINISCENCE SCORES

0 1 2 3 4 5 6 7 8

D1 D2 D1 D2
FIG. III  AGE AND REMINISCENCE  
(EXTRAVERSION GROUP)
FIG. IV  
SEX AND REMINISCENCE  
(EXTRAVERSION GROUP) 

SCALE 
1 LARGE SQ. = 1 
S₁ - BOYS 
S₂ - GIRLS 

- SUBSTITUTE 
- BACKWARD FIGURE 
- WRITING 

MEAN REMINISCENCE SCORES 

S₁  S₂  S₁  S₂
The comparison of means for the two personality groups (Table 2), indicates that high on Extraversion group ($E^+$) yields higher reminiscence scores than low on Extraversion group ($E^-$) in both the tasks, i.e., Substitution and Backward Figure Writing. In Figure I also which shows the mean reminiscence scores of the two personality groups ($E^+,E^-$), the same effect has been portrayed. On both the psychomotor tasks high on Extraversion group shows greater reminiscence than low on Extraversion group. Figure I also reveals that both the $E^+$ and $E^-$ groups show greater reminiscence on Backward Figure Writing in comparison to Substitution task.

As hypothesized, the difference in the mean scores of reminiscence of high and low-drive groups favours the high-drive group on both the tasks (Table 2). These results clearly indicate that verbally induced motivation produced greater reminiscence. Figure II shows mean reminiscence scores of the two drive groups. Both on Substitution and Backward Figure Writing tasks the high-drive group shows greater reminiscence than the low-drive group. Here too, it is clearly portrayed that both the drive groups yield greater reminiscence on Backward Figure Writing than Substitution task.

The means of reminiscence scores of the three age groups (Table 2) clearly show that on the Substitution task the 14 year age group yields the greatest reminiscence scores.
followed by the 12 year age group, with the 10 year age groups showing the least reminiscence. The pattern is reversed in case of Backward Figure writing, with the 10 year age group showing the maximum reminiscence followed by 12 and 14 year age groups. Figure III shows the reminiscence of different age groups on both the tasks. Here also it is clear that whereas older age groups consistently show better reminiscence than younger age groups on the Substitution task, the advantage is in favour of the younger age groups in comparison with the older age groups on Backward Figure Writing. Also, all the three age groups show greater reminiscence on Backward Figure Writing than on Substitution task, i.e., reminiscence improves with age in Substitution task, but decreases with age in Backward Figure Writing.

Considering sex differences, Table 2 reveals that boys show greater reminiscence than girls on both Substitution and Backward Figure Writing Tasks. Figure IV shows the mean reminiscence scores of boys and girls. The graph reveals superior reminiscence of boys over girls in Substitution and Backward Figure Writing tasks. As shown in the earlier figures, here also amount of reminiscence shown by boys and girls is greater in Backward Figure Writing than in Substitution task.

As means of reminiscence scores of personality, drive, age and sex groups were consistently superior for
Backward Figure Writing than Substitution task, task-specific nature of reminiscence clearly emerges in this experiment. The negative value of the correlation between reminiscence scores of the two groups on both the tasks indicates dissimilar nature of the tasks ($r = -0.01$).

For the Extraversion group, a four-way Analysis of Variance (Edwards, 1968) -2x2x3x2- was performed to see if personality (Extraversion, $E^+$, $E^-$), drive, age and sex are significant determiners of reminiscence and to find the significance of the interactions among these determiners.

Analysis of Variance of reminiscence scores on the Substitution task (Table 3) shows that the main effects of personality, drive, age and sex; the two factor interactions of personality and drive, personality and age, personality and sex, drive and age, drive and sex and age and sex; the three-factor interactions of personality, drive and age, personality, drive and sex, personality, age and sex and drive, age and sex were all found to be insignificant. The four-factor interaction of personality, drive, age and sex, however, emerged significant ($F = 5.59$, $p < .01$), and is shown in Contingency Table I. This table reveals that high on Extraversion group in comparison to low on Extraversion group, high-drive group in comparison to the low-drive group, older age groups in comparison to younger age groups and boys in
### Table 3 (Extraversion Group)

#### Analysis of Variance of Reminiscence Scores on the Substitution Task

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>18.15</td>
<td>1</td>
<td>18.15</td>
<td>0.92</td>
<td>n.s.</td>
</tr>
<tr>
<td>D</td>
<td>52.27</td>
<td>1</td>
<td>52.27</td>
<td>2.67</td>
<td>n.s.</td>
</tr>
<tr>
<td>A</td>
<td>30.91</td>
<td>2</td>
<td>15.45</td>
<td>0.79</td>
<td>n.s.</td>
</tr>
<tr>
<td>S</td>
<td>3.75</td>
<td>1</td>
<td>3.75</td>
<td>0.19</td>
<td>n.s.</td>
</tr>
<tr>
<td>PxD</td>
<td>2.82</td>
<td>1</td>
<td>2.82</td>
<td>0.14</td>
<td>n.s.</td>
</tr>
<tr>
<td>PxA</td>
<td>62.72</td>
<td>2</td>
<td>31.36</td>
<td>1.60</td>
<td>n.s.</td>
</tr>
<tr>
<td>PxS</td>
<td>8.07</td>
<td>1</td>
<td>8.07</td>
<td>0.41</td>
<td>n.s.</td>
</tr>
<tr>
<td>DxA</td>
<td>57.91</td>
<td>2</td>
<td>28.95</td>
<td>1.48</td>
<td>n.s.</td>
</tr>
<tr>
<td>DzS</td>
<td>70.42</td>
<td>1</td>
<td>70.42</td>
<td>3.59</td>
<td>n.s.</td>
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<tr>
<td>Axs</td>
<td>101.27</td>
<td>2</td>
<td>50.64</td>
<td>2.58</td>
<td>n.s.</td>
</tr>
<tr>
<td>PxDxA</td>
<td>55.86</td>
<td>2</td>
<td>17.93</td>
<td>0.91</td>
<td>n.s.</td>
</tr>
<tr>
<td>PxDxS</td>
<td>2.40</td>
<td>1</td>
<td>2.40</td>
<td>0.12</td>
<td>n.s.</td>
</tr>
<tr>
<td>PxAxS</td>
<td>43.86</td>
<td>2</td>
<td>21.93</td>
<td>1.12</td>
<td>n.s.</td>
</tr>
<tr>
<td>DxAxS</td>
<td>3.51</td>
<td>2</td>
<td>1.65</td>
<td>0.08</td>
<td>n.s.</td>
</tr>
<tr>
<td>PxDxAxS</td>
<td>219.02</td>
<td>2</td>
<td>109.51</td>
<td>5.59</td>
<td>.01</td>
</tr>
<tr>
<td>Error</td>
<td>4234.20</td>
<td>216</td>
<td>19.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4946.93</td>
<td>239</td>
<td>20.70</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Symbols**

- P = Personality;
- D = Drive;
- A = Age;
- S = Sex;
- \( \text{Total sum of squares} \)
### Contingency Table - I (Extraversion Group)

**Substitution Mean Scores**  
(Personality x Drive x Age x Sex)

<table>
<thead>
<tr>
<th>Extraversion Motivation</th>
<th>Age Groups</th>
<th>Sex</th>
<th>Substitutions</th>
<th>A₁</th>
<th>B₁</th>
<th>C₁</th>
<th>A₂</th>
<th>B₂</th>
<th>C₂</th>
<th>A₃</th>
<th>B₃</th>
<th>C₃</th>
</tr>
</thead>
<tbody>
<tr>
<td>$E^{+}$ D₁</td>
<td>7.90</td>
<td>3.20</td>
<td>6.70</td>
<td>7.50</td>
<td>6.90</td>
<td>6.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$D₂$</td>
<td>4.50</td>
<td>5.80</td>
<td>4.50</td>
<td>6.80</td>
<td>6.40</td>
<td>3.60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$E^{-}$ D₁</td>
<td>5.20</td>
<td>4.50</td>
<td>6.20</td>
<td>5.80</td>
<td>7.30</td>
<td>4.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$D₂$</td>
<td>7.10</td>
<td>3.60</td>
<td>1.70</td>
<td>4.10</td>
<td>3.90</td>
<td>9.20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$E^{+}$ = 5.84 $D₁$ = 6.03 $A₁$ = 5.22 $B₁$ = 5.69  
$E^{-}$ = 5.29 $D₂$ = 5.10 $A₂$ = 5.41 $B₂$ = 5.44  
$A₃$ = 6.06

**Symbols**  
$E^{+}$ - High on Extraversion;  
$D₁$ - High Drive;  
$A₁$ - 10 year age group;  
$B₁$ - Boys;  
$E^{-}$ - Low on Extraversion;  
$D₂$ - Low Drive;  
$A₂$ - 12 year age group;  
$B₂$ - Girls;  
A₃ - 14 year age group;
### Table 4 (Introversion Group)

#### Analysis of Variance of Reminiscence Scores on the Backward Figure Writing Task

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>199.84</td>
<td>1</td>
<td>199.84</td>
<td>4.93</td>
<td>.05</td>
</tr>
<tr>
<td>D</td>
<td>116.20</td>
<td>1</td>
<td>116.20</td>
<td>2.63</td>
<td>n.s.</td>
</tr>
<tr>
<td>A</td>
<td>113.41</td>
<td>2</td>
<td>56.70</td>
<td>1.29</td>
<td>n.s.</td>
</tr>
<tr>
<td>S</td>
<td>78.20</td>
<td>1</td>
<td>78.20</td>
<td>1.77</td>
<td>n.s.</td>
</tr>
<tr>
<td>PxD</td>
<td>142.60</td>
<td>1</td>
<td>142.60</td>
<td>3.23</td>
<td>n.s.</td>
</tr>
<tr>
<td>PxA</td>
<td>18.08</td>
<td>2</td>
<td>9.04</td>
<td>0.20</td>
<td>n.s.</td>
</tr>
<tr>
<td>PxS</td>
<td>45.94</td>
<td>1</td>
<td>45.94</td>
<td>1.04</td>
<td>n.s.</td>
</tr>
<tr>
<td>DXA</td>
<td>11.11</td>
<td>2</td>
<td>5.55</td>
<td>0.13</td>
<td>n.s.</td>
</tr>
<tr>
<td>DXS</td>
<td>22.20</td>
<td>1</td>
<td>22.20</td>
<td>0.30</td>
<td>n.s.</td>
</tr>
<tr>
<td>AXS</td>
<td>73.91</td>
<td>2</td>
<td>36.95</td>
<td>0.84</td>
<td>n.s.</td>
</tr>
<tr>
<td>PxDxA</td>
<td>84.91</td>
<td>2</td>
<td>42.15</td>
<td>0.96</td>
<td>n.s.</td>
</tr>
<tr>
<td>PxDxS</td>
<td>51.34</td>
<td>1</td>
<td>51.34</td>
<td>1.16</td>
<td>n.s.</td>
</tr>
<tr>
<td>PXA</td>
<td>0.77</td>
<td>2</td>
<td>0.39</td>
<td>0.01</td>
<td>n.s.</td>
</tr>
<tr>
<td>DXAxD</td>
<td>201.61</td>
<td>2</td>
<td>100.90</td>
<td>2.29</td>
<td>n.s.</td>
</tr>
<tr>
<td>PxDAxS</td>
<td>25.27</td>
<td>2</td>
<td>12.64</td>
<td>0.29</td>
<td>n.s.</td>
</tr>
<tr>
<td>Error</td>
<td>9526.90</td>
<td>216</td>
<td>44.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>10711.90</td>
<td>239</td>
<td>44.82</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Symbols

- **P** = Personality
- **D** = Drive
- **A** = Age
- **S** = Sex
- **Tss** = Total sum of squares
comparison to girls yield greater reminiscence scores. The same effect can be observed in the graphic presentation (Figure V).

Analysis of Variance of reminiscence scores on Backward Figure Writing (Table 4) shows that F-ratio for personality (F = 4.53, p < .05) emerges significant for the Extraversion group. The F-ratio for differences between high and low-drive groups, among the three age groups and between boys and girls were insignificant. All the two-factor interactions, three-factor interactions and four-factor interaction were found to be insignificant.

Neuroticism Group

Means, SDs of reminiscence scores on the Substitution and Backward Figure Writing tasks of personality, drive, age and sex groups are shown in Table 5. These means have been diagrammatically presented in Figures VI to IX.

The comparison of mean scores of the two personality groups (Table 5), shows that high on Neuroticism group (N+) shows superior reminiscence than low on Neuroticism (N-) group in both the tasks Substitution and Backward Figure Writing. Figure VI which shows mean reminiscence scores of these two personality groups (N+, N-) portrays the same effect. High on Neuroticism group yields greater reminiscence
Table 5 (Neuroticism Group)

Means and SDs of Reminiscence Scores on the Substitution and Backward Figure Writing Tasks

<table>
<thead>
<tr>
<th></th>
<th>Substitution</th>
<th></th>
<th>Backward Figure Writing</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td><strong>Personality</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N+</td>
<td>6.49</td>
<td>4.71</td>
<td>7.64</td>
<td>5.34</td>
</tr>
<tr>
<td>N−</td>
<td>4.92</td>
<td>4.39</td>
<td>4.68</td>
<td>5.94</td>
</tr>
<tr>
<td><strong>Drive</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D1</td>
<td>6.23</td>
<td>4.43</td>
<td>7.14</td>
<td>5.12</td>
</tr>
<tr>
<td>D2</td>
<td>5.17</td>
<td>4.75</td>
<td>5.38</td>
<td>6.40</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A1</td>
<td>4.76</td>
<td>3.15</td>
<td>7.14</td>
<td>5.37</td>
</tr>
<tr>
<td>A2</td>
<td>5.72</td>
<td>4.72</td>
<td>5.72</td>
<td>5.57</td>
</tr>
<tr>
<td>A3</td>
<td>6.62</td>
<td>5.51</td>
<td>5.92</td>
<td>6.52</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S1</td>
<td>5.01</td>
<td>3.81</td>
<td>5.62</td>
<td>5.34</td>
</tr>
<tr>
<td>S2</td>
<td>6.40</td>
<td>5.23</td>
<td>6.90</td>
<td>6.28</td>
</tr>
</tbody>
</table>

**Symbols**
- N+ - High on Neuroticism
- N− - Low on Neuroticism
- D1 - High Drive
- D2 - Low Drive
- A1 - 10 year age group
- A2 - 12 year age group
- A3 - 14 year age group
- S1 - Boys
- S2 - Girls
Neuroticism and Reminiscence

(Neuroticism Group)

Scale:
1 large sq. cm

N+ - High on neuroticism
N- - Low on neuroticism

Mean Reminiscence Scores

Substitution
Backward Figure Writing
FIG. VII  DRIVE AND REMINISCENCE  
(NEUROTICISM GROUP)
FIG. VIII  AGE AND REMINISCENCE  
(NEUROTICISM GROUP)  

SCALE  
1 LARGE SQ. = 1  

$A_1$ - 10 YEAR AGE GROUP  
$A_2$ - 12 YEAR AGE GROUP  
$A_3$ - 14 YEAR AGE GROUP  

- SUBSTITUTION  
- BACKWARD FIGURE  
- WRITING  

MEAN REMINISCENCE SCORES  

A1  A2  A3  A1  A2  A3
FIG. IX  SEX AND REMINISCENCE
(NEUROTICISM GROUP)

SCALE
1 LARGE SQ. = 1

$S_1$ - BOYS
$S_2$ - GIRLS

- SUBSTITUTION
- BACKWARD FIGURE
- WRITING

MEAN REMINISCENCE SCORES

$S_1$  $S_2$  $S_1$  $S_2$
than low on Neuroticism group. Figure VI also reveals that the $N^+$ group shows greater reminiscence on Backward Figure Writing, whereas $N^-$ group shows greater reminiscence on Substitution task.

The difference in the mean scores of reminiscence of high-drive and low-drive group is clearly in favour of the high-drive group on both Substitution and Backward Figure Writing as shown in Table 5. Figure VII shows mean reminiscence scores of both the drive groups. The high-drive groups show greater reminiscence than the low drive groups on Substitution and Backward Figure Writing. Also, both the high and low-drive groups show greater reminiscence on Backward Figure Writing than Substitution task.

The comparison of mean scores of three age groups (Table 5), reveals that as hypothesized the 14 year age group shows greatest reminiscence in case of Substitution task, followed by 12 and 10 year age groups. On Backward Figure Writing the youngest 10 year age group yields greatest reminiscence scores, followed by 14 year age group with the 12 year age group yielding the least. Figure VII shows the reminiscence scores of the three age groups on Substitution and Backward Figure Writing. The figure also reveals that whereas on Substitution consistent advantage of older age groups over younger ones in reminiscence is shown, no such
pattern is established in Backward Figure Writing. 14 year age group and 10 year age group show greater reminiscence on Backward Figure Writing whereas 12 year age group shows the same amount of reminiscence on both Substitution and Backward Figure Writing.

Considering sex differences, Table 5 shows that girls are superior to boys on reminiscence in Substitution and Backward Figure Writing. Figure IX portrays the mean reminiscence scores of boys and girls and shows that girls have higher reminiscence scores than boys on Substitution and Backward Figure Writing. The figure also shows that on Backward Figure Writing both boys and girls show greater reminiscence than on Substitution task.

As in the Extraversion group, means of reminiscence scores of personality, drive, age and sex groups in the Neuroticism group as well, highlight the task-specific nature of reminiscence as most of the groups being studied, yield greater reminiscence scores on Backward Figure Writing. Further evidence that the two tasks are dissimilar in nature is provided by the fact that correlations between reminiscence scores on both the tasks are negligible ($r = .05$).

For the Neuroticism group, a four-way Analysis of Variance (Edwards, 1968) was performed to see if personality ($N^+$, $N^-$), drive, age and sex emerge as significant determiners
of reminiscence and to find significance of interactions among these variables.

Analysis of Variance of reminiscence scores on substitution (Table 6) shows that F-ratios for personality ($F = 7.63, p < .01$), age ($F = 3.56, p < .05$) and sex ($F = 5.95, p < .05$) emerge significant. F-ratio for drive was found to be insignificant. The two-factor interaction of personality and drive, personality and age, personality and sex, drive and age, drive and sex, the three-factor interactions of personality, drive and age, personality, drive and sex, personality, age and sex, and drive, age and sex and four-factor interaction of personality, drive, age and sex were insignificant. The two-factor interaction of age and sex which was found to be significant at .01 level (Contingency Table II) shows that overall reminiscence scores of older age groups were higher than that of younger age groups and girls yielded greater reminiscence scores than boys. Scores on reminiscence of the two sexes when compared separately in the 3 age groups revealed that reminiscence increases with age in girls and decreases with age in boys. The same effect has been graphically portrayed in Figure I.

Analysis of Variance of reminiscence scores on Backward Figure Writing (Table 7) shows that personality and
### Table-4 (Neuroticism Group)

**Analysis of Variance of Reminiscence Scores on the Substitution Task**

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>148.84</td>
<td>1</td>
<td>148.84</td>
<td>7.63</td>
<td>.01</td>
</tr>
<tr>
<td>D</td>
<td>67.20</td>
<td>1</td>
<td>67.20</td>
<td>3.44</td>
<td>n.s.</td>
</tr>
<tr>
<td>A</td>
<td>138.81</td>
<td>2</td>
<td>69.40</td>
<td>5.56</td>
<td>.05</td>
</tr>
<tr>
<td>S</td>
<td>116.20</td>
<td>1</td>
<td>116.20</td>
<td>5.95</td>
<td>.05</td>
</tr>
<tr>
<td>PxD</td>
<td>22.20</td>
<td>1</td>
<td>22.20</td>
<td>1.14</td>
<td>n.s.</td>
</tr>
<tr>
<td>PxA</td>
<td>41.92</td>
<td>2</td>
<td>20.96</td>
<td>1.07</td>
<td>n.s.</td>
</tr>
<tr>
<td>PxA</td>
<td>26.00</td>
<td>1</td>
<td>26.00</td>
<td>1.33</td>
<td>n.s.</td>
</tr>
<tr>
<td>DxA</td>
<td>1.11</td>
<td>2</td>
<td>0.55</td>
<td>0.03</td>
<td>n.s.</td>
</tr>
<tr>
<td>DxS</td>
<td>47.70</td>
<td>1</td>
<td>47.70</td>
<td>2.44</td>
<td>n.s.</td>
</tr>
<tr>
<td>AX3</td>
<td>157.06</td>
<td>2</td>
<td>93.53</td>
<td>4.79</td>
<td>.01</td>
</tr>
<tr>
<td>PxDxA</td>
<td>12.86</td>
<td>2</td>
<td>6.43</td>
<td>0.33</td>
<td>n.s.</td>
</tr>
<tr>
<td>PxDxS</td>
<td>2.20</td>
<td>1</td>
<td>2.20</td>
<td>0.11</td>
<td>n.s.</td>
</tr>
<tr>
<td>PxAxS</td>
<td>25.61</td>
<td>2</td>
<td>12.80</td>
<td>0.66</td>
<td>n.s.</td>
</tr>
<tr>
<td>DxAxS</td>
<td>24.56</td>
<td>2</td>
<td>12.28</td>
<td>0.63</td>
<td>n.s.</td>
</tr>
<tr>
<td>PxDxAxS</td>
<td>13.81</td>
<td>2</td>
<td>6.90</td>
<td>0.35</td>
<td>n.s.</td>
</tr>
<tr>
<td>Error</td>
<td>4215.90</td>
<td>216</td>
<td>19.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5092.00</td>
<td>239</td>
<td>21.30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Symbols**

- P = Personality
- A = Age
- D = Drive
- S = Sex
- Pdf = Total sum of squares
Table 7 (Neuroticism Group)

Analysis of Variance of Reminiscence Scores on the Backward Figure Writing Task

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>598.50</td>
<td>1</td>
<td>598.50</td>
<td>19.33</td>
<td>.01</td>
</tr>
<tr>
<td>D</td>
<td>185.50</td>
<td>1</td>
<td>185.50</td>
<td>5.99</td>
<td>.05</td>
</tr>
<tr>
<td>A</td>
<td>93.47</td>
<td>2</td>
<td>46.74</td>
<td>1.51</td>
<td>n.s.</td>
</tr>
<tr>
<td>S</td>
<td>97.54</td>
<td>1</td>
<td>97.54</td>
<td>3.15</td>
<td>n.s.</td>
</tr>
<tr>
<td>PxD</td>
<td>45.94</td>
<td>1</td>
<td>45.94</td>
<td>1.48</td>
<td>n.s.</td>
</tr>
<tr>
<td>PxA</td>
<td>73.56</td>
<td>2</td>
<td>36.78</td>
<td>1.19</td>
<td>n.s.</td>
</tr>
<tr>
<td>PXS</td>
<td>142.60</td>
<td>1</td>
<td>142.60</td>
<td>4.60</td>
<td>.05</td>
</tr>
<tr>
<td>DxA</td>
<td>0.76</td>
<td>2</td>
<td>0.38</td>
<td>0.01</td>
<td>n.s.</td>
</tr>
<tr>
<td>DxE</td>
<td>21.00</td>
<td>1</td>
<td>21.00</td>
<td>0.68</td>
<td>n.s.</td>
</tr>
<tr>
<td>AXS</td>
<td>41.27</td>
<td>2</td>
<td>20.64</td>
<td>0.67</td>
<td>n.s.</td>
</tr>
<tr>
<td>PxDxA</td>
<td>117.17</td>
<td>2</td>
<td>58.59</td>
<td>1.89</td>
<td>n.s.</td>
</tr>
<tr>
<td>PxEAXS</td>
<td>37.60</td>
<td>1</td>
<td>37.60</td>
<td>1.21</td>
<td>n.s.</td>
</tr>
<tr>
<td>PEAXE</td>
<td>14.56</td>
<td>2</td>
<td>7.28</td>
<td>0.23</td>
<td>n.s.</td>
</tr>
<tr>
<td>DEXA</td>
<td>18.96</td>
<td>2</td>
<td>9.43</td>
<td>0.30</td>
<td>n.s.</td>
</tr>
<tr>
<td>PxDExa</td>
<td>9.61</td>
<td>2</td>
<td>4.80</td>
<td>0.15</td>
<td>n.s.</td>
</tr>
<tr>
<td>Error</td>
<td>6686.50</td>
<td>216</td>
<td>30.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8186.46</td>
<td>239</td>
<td>34.25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Symbols
- P = Personality
- D = Drive
- A = Age
- S = Sex
- Tss = Total sum of squares
### Contingency Table-II (Neuroticism Group)

**Substitution Mean Scores**  
*(Age x Sex)*

<table>
<thead>
<tr>
<th>Age Groups</th>
<th>Substitutions</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$s_1$</td>
<td>$s_2$</td>
</tr>
<tr>
<td>$A_1$</td>
<td>5.15</td>
<td>4.57</td>
</tr>
<tr>
<td>$A_2$</td>
<td>5.02</td>
<td>6.42</td>
</tr>
<tr>
<td>$A_3$</td>
<td>4.85</td>
<td>6.40</td>
</tr>
<tr>
<td></td>
<td>5.01</td>
<td>6.40</td>
</tr>
</tbody>
</table>

### Contingency Table-III (Neuroticism Group)

**Backward Figure Writing Mean Scores**  
*(Personality x Sex)*

<table>
<thead>
<tr>
<th>Neuroticism</th>
<th>Figures</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$s_1$</td>
<td>$s_2$</td>
</tr>
<tr>
<td>$N^+$</td>
<td>6.43</td>
<td>9.25</td>
</tr>
<tr>
<td>$N^-$</td>
<td>4.82</td>
<td>4.55</td>
</tr>
<tr>
<td>$N^+$</td>
<td>5.62</td>
<td>6.40</td>
</tr>
</tbody>
</table>

**Symbols**
- $N^+$ = High on Neuroticism;  
- $A_1$ = 10 year age group;  
- $A_2$ = 12 year age group;  
- $A_3$ = 14 year age group;  
- $s_1$ = Boys;  
- $s_2$ = Girls.
drive emerge as significant determiners of reminiscence on Backward Figure Writing, F-ratios being 19.33, p < .01; and 5.99, p < .05 for personality and drive respectively. Out of the two-factor interactions, the interaction of personality and sex is the only interaction which emerges significant (F = 4.60, p < .05). Rest of the two-factor interactions, three factor interactions and four-factor interaction were insignificant. The two-factor interaction of personality and sex which emerged significant at .05 level (Contingency Table III) shows that reminiscence scores of $N^+$ groups were higher than $N^-$ groups for both the sexes. Although, overall reminiscence scores of girls were higher than that of boys, scores on reminiscence of the two sexes compared separately in the two personality groups shows superiority of girls in $N^+$ group and superiority of boys in $N^-$ group. The same effect has been graphically presented in Figure XI.