Evaluating Hypnotic Memory Enhancement (Hypermnesia and Reminiscence) Using Multitrial Forced Recall

David F. Dinges, Wayne G. Whitehouse, Emily Carota Orne, John W. Powell, and Martin T. Orne
The Institute of Pennsylvania Hospital and University of Pennsylvania

Matthew H. Erdelyi
Brooklyn College, City University of New York
Vocabulary

❖ Hypermnesia
  ❖ unusual power or enhancement of memory, typically under abnormal conditions

❖ Reminiscence
  ❖ recollection of past events

❖ Hypnosis
  ❖ the induction of a state of consciousness in which a person apparently loses the power of voluntary action

❖ Forced-recall
  ❖ participants are required to fill in all spaces on a test of memory
Variables

- Hypnotizability of subject sample
- Nature of the hypnotic suggestions
- Choice of stimulus or memory test
- The pool of accessible memories
- Subject’s willingness to report recollections
- The confidence placed on said reports
Experiment 1

- Effect of hypnosis on a multi-trial forced recall of pictorial stimuli following a one week retention interval
- Mean number of correctly recalled pictures
Experiment 1
Experiment 2

- Impact of a single hypnotic recall opportunity administered after subjects had attempted to recall in the waking condition
- Mean number of items
Conclusions

- Hypnosis again failed to enhance retrieval of new correct items, although it increased the production of new incorrect recall among hypnotizable individuals.

- The findings provide no evidence for alleged hypermnesic properties of hypnosis.

<table>
<thead>
<tr>
<th></th>
<th>R3</th>
<th>R4</th>
<th>R5</th>
<th>R6</th>
<th>R7</th>
<th>R8</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Correct</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$M$</td>
<td>3.07</td>
<td>1.81</td>
<td>2.00</td>
<td>1.07</td>
<td>1.22</td>
<td>0.76</td>
</tr>
<tr>
<td>$SD$</td>
<td>1.65</td>
<td>1.45</td>
<td>1.72</td>
<td>0.91</td>
<td>1.01</td>
<td>0.89</td>
</tr>
<tr>
<td>$r$</td>
<td>0.13</td>
<td>-0.09</td>
<td>0.07</td>
<td>0.12</td>
<td>-0.11</td>
<td>-0.03</td>
</tr>
<tr>
<td><strong>Incorrect</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$M$</td>
<td>1.15</td>
<td>0.73</td>
<td>0.66</td>
<td>0.63</td>
<td>0.32</td>
<td>1.42</td>
</tr>
<tr>
<td>$SD$</td>
<td>1.33</td>
<td>0.92</td>
<td>1.33</td>
<td>1.09</td>
<td>0.65</td>
<td>1.91</td>
</tr>
<tr>
<td>$r$</td>
<td>0.07</td>
<td>0.19</td>
<td>0.10</td>
<td>-0.24</td>
<td>-0.14</td>
<td>0.33*</td>
</tr>
</tbody>
</table>

* $p < .05$. 