

QUANTIFYING SUBJECTIVE REPORTS DURING POSTHYPNOTIC AMNESIA

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This study reports a preliminary analysis of the subjective reports elicited from *Ss* while they attempted to reconstruct what had happened during hypnosis following the suggestion of posthypnotic amnesia. Three broad questions were explored. (a) To what extent could a judge reading a transcript of *S's* amnesia report successfully predict his level of hypnotic susceptibility? (b) Are there special differentiating characteristics of the structure of the verbal report of the experiences recalled by *Ss* who are susceptible to hypnosis? (c) What is the content of the susceptible *S's* verbal report, particularly of that part which is not directly relevant to the listing of suggestions recalled?

PROCEDURE

The tape-recorded version of the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A) was administered in small groups to 167 volunteer students.¹ Posthypnotic amnesia is the last of the 12 standardized suggestions. At the completion of the hypnosis experience, *Ss* filled in the standard HGSHS:A self-report booklet. On the first page they are given 3 min. to "write down briefly in your own words a list of the things that happened since you began looking at the target."

Exact transcripts of the handwritten reports were later typed and coded. All ratings of these transcripts were carried out blind by raters who did not know *Ss's* hypnotic susceptibility. The ratings made by the judges, as well as the various word counts made with the transcripts, were compared with the hypnotic susceptibility levels based on HGSHS:A performance. There were 60 high susceptible *Ss* (scoring 8-12 on HGSHS:A), 58 medium susceptible *Ss* (5-7), and 49 low susceptible *Ss* (0-4).

RESULTS

Blind ratings of hypnotizability from amnesia protocols. Two raters with substantial experience administering standardized hypnosis scales and scoring amnesia judged whether each verbatim protocol belonged to a high, medium, or low susceptible *S*. Three different ratings were made: (a) Judgments were made with no information about the parametric characteristics of the sample other than the raters' knowledge based on their prior experience with similar samples. (b) As a means of testing rater consistency, judgments were made again about 1 wk. later. (c) In order to force the raters to base their judgments on their qualitative impressions, independently of the number of items *S* recalled, *Ss* were grouped according to the number of items recalled during amnesia. The raters were informed of the exact number of high, medium, and low susceptible *Ss* in each of these subgroups, resulting in judgments made independently of the number of items *S* recalled during amnesia testing.

Four generalizations can be drawn from the data: (a) The raters agreed with each other about as well as they agreed with themselves. (b) A rater can read *S's* verbal report during amnesia and can intuitively judge whether he is a high, medium, or low hypnotizable *S* significantly better than chance, and at least as well as he could do by merely counting the number of items *S* recalled using objective criteria. (c) These ratings are, however, not merely based on an implicit word count. On Rating *d*, when *Ss* are matched for number of items recalled during amnesia, the same level of correct, mutually agreed upon identifications that occurred on the first rating was maintained (about 60% correct judgments). Thus, the ratings could be made quite independently of the objective scoring criteria. (d) The low levels of reliability and accuracy were primarily a function of the raters' inability to judge medium susceptible *Ss*. If the medium *Ss* are dropped from the analysis, inter- and intrajudge reliabilities increase from around .6 to above .9. Depending on the rating analyzed, judges correctly identified 65-82% of the high *Ss*, 58-68% of low *Ss*, but only 47-56% of the medium susceptible *Ss*.

The results indicate that the successful blind identification of hypnotizable *Ss* from their amnesia transcripts was not a function of the number of items recalled during posthypnotic amnesia. Another potentially important cue was found to be relatively unimportant. The two judges had previously reported that hypnotizable *Ss* who manage to recall some of the items in spite of the amnesia tend to recall these items in relatively random order compared to the sequential recall of insusceptible *Ss*. The judges' impressions that this was not a major determinant of their ratings was confirmed by the low correlation between the order of recall statistic and their actual ratings (e.g., .22 and .23, .23 and .05, for Ratings *a* and *d* made by the two judges, respectively; $N = 110$).

*Word count differences during amnesia.*² In an attempt to clarify how *Ss* went about the task of describing their memory of the hypnosis experiences, several word counts were made from the transcripts. Several findings support the hypothesis that the process of recalling is qualitatively different for highly susceptible *Ss* than for insusceptible *Ss*: (a) Even those *Ss* who failed to recall any items wrote several comments during the testing of amnesia. (b) Insusceptible *Ss* tended to spend most of their efforts directly listing the suggested events, while

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¹The individually administered standardized scales were not used in this study because of the ease with which *E* could potentially bias or affect the verbal reports being given by *S* while amnesia was being tested.

²All comparisons are based on two-tailed *t* tests. Medium susceptible *Ss* have intermediate ratings and performance in all of the results discussed.

susceptible Ss spent more than half of their less productive output describing experiences not directly relevant to enumerating items. (c) Susceptible Ss apparently did not describe their memories in as great detail, perhaps because they had greater difficulty in recalling their experiences. (d) Susceptible Ss wrote almost half (40%) of their total words before ever mentioning an item, whereas insusceptible Ss used proportionately only half as many words getting to relevant material (20%, $p < .001$). (e) Each of these variables is, of course, significantly correlated with the objective amnesia score. Thus, the proportion of irrelevant words used to describe their hypnosis experiences correlates .71 with the number of items forgotten. The more amnesia that is experienced, the more likely S has written about aspects of his experience that are unrelated to the items he is trying to recall.

What do amnesic Ss recall? If hypnotizable Ss with amnesia spend most of their effort listing things that are not related to the suggestions they are trying to recall, what do they write about? Examination of the transcripts indicated at least three kinds of content which was "irrelevant" in terms of enumerating or describing scorable items.

Several Ss listed events that were not scored as one of the nine items included in the amnesia recall (head falling forward, fixate on target, induction procedure, suggestion of amnesia, termination of hypnosis). It was possible that highly susceptible Ss might have had an unclear concept of what constitutes an item that is to be recalled, and therefore in their writing might have focused on more "nonitem" experiences. However, high and low Ss did not differ in their propensity to list the scorable nonitem events (1.36 vs. 1.57, respectively, $t = 1.07, ns$).

Several Ss commented on either of two cognitive changes they experienced during the induction procedure. These changes related to changes in the visual field, particularly with the fixation spot used in the induction, and in body distortions experienced during the hypnosis. Both were rated independently on 4-point scales. Examples of high *distorted visual field* included extreme color and size changes or autokinesis of the target, blurred periphery, etc. A high rated *body distortion* included nonveridical body experiences such as feelings of floating, falling, and inflated limbs.³

Those Ss with high scores on both target and body distortions were significantly more amnesic than Ss who

³This report is concerned only with the incidence of such reports, and not the use of such content to characterize hypnosis, as the overall meaning of these events would be quite different for hypnotizable and insusceptible Ss.

did not have such vivid experiences ($p < .001$ for both ratings). Highly susceptible Ss were rated significantly higher on the body distortion scale ($p < .01$) but not on the target distortion scale than insusceptible Ss.

In general, those hypnotizable Ss with amnesia tended to spend time describing events not related to the suggested items. Instead, they wrote about some of their more compelling subjective experiences during hypnosis.⁴

DISCUSSION

These results support the hypothesis that a suggestion for posthypnotic amnesia has demonstrable effects other than merely reducing the number of experiences recalled posthypnotically. Hypnotizable Ss with amnesia use significantly fewer words to describe each item than insusceptible Ss, but spend almost twice as much of their report describing experiences unrelated to the specific items suggested. They comment on these "irrelevant" experiences even before enumerating any of the relevant suggestions they can recall. At least in part, these irrelevant comments are likely to be related to some of the special effects of their hypnotic experiences, particularly those concerned with perceived changes and distortions in body size as well as cognitive changes in the visual field associated with the induction procedure.

These kinds of findings, when replicated and expanded, will provide important clues about the nature of posthypnotic amnesia. Not only do hypnotized Ss recall fewer of the hypnosis suggestions, their verbal reports during amnesia can be correctly identified by blind raters (independently of the number of experiences recalled). Qualitative aspects of their recall can be delineated in such a way as to differentiate them from insusceptible Ss. Even those Ss who recalled no items seemed to be struggling to remember some of their experiences, rather than merely leaving a blank page. Although hypnotizable Ss may recall some experiences, their descriptions of the suggestions were briefer and often lacked relevant details. The retrieval difficulty experienced by hypnotizable Ss implies an organizational structure for the hypnosis experiences which differs from that of insusceptible Ss, as well as that of waking memory.

⁴It is possible that these reports have little to do with amnesia *per se*. Rather, S may feel compelled to comment upon these vivid and unusual experiences which were produced by the hypnotic procedure, relegating the task of recalling numbers (intentionally or unintentionally) to secondary importance. This is an empirical issue which can be tested. However, the fact that these Ss wrote significantly fewer total words argues against such a possibility.