The Power of Hypnosis to Reduce the Attentional Blink
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INTRODUCTION

The Attentional Blink (AB) refers to the failure to detect a target while processing an earlier one. It has been attributed to limited attentional resources. (Dux & Marois, 2009).

The use of hypnotic suggestion to moderate selective attention has been repeatedly demonstrated (Spiegel & Spiegel, 2008), e.g., hypnotic suggestion has been used to enhance performance on the Stroop test (Raz, Fan & Posner, 2004).

In the present experiment we explored whether post-hypnotic suggestion can reduce the AB when it directs attention exclusively to the targets. We hypothesized that highly suggestible individuals will increase accuracy in T2 identification when it is presented within 500ms after T1, the normal window in which the AB occurs.

PARTICIPANTS

31 students from various universities of New York participated in the study. 21 participants were selected from a larger group of volunteers on the basis of their hypnotic susceptibility, using the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS-A, Shor&Orne, 1962). Group 1 included 12 participants who scored in the highly suggestible range (9 to 12 of a possible 12 on HGSHS-A), group 2 included 9 participants who scored in the less suggestible range (1 to 5 of a possible 12 on HGSHS-A) and group 3 included 10 volunteers who did not participate in the screening.

PROCEDURE

Highly Suggestible and Low Suggestible groups

POST HYPNOTIC SUGGESTION

To listen ask for

RESULTS

All three groups showed an equivalent AB in the first set of trials. Group 1 (Highly suggestible) had a significantly smaller AB in the second set of trials than in the first Mdiff=15.3, p<.001,d=1.162. Group 1 had a significantly smaller AB relative to groups 2 (Low suggestible) Mdiff=16.5, p=.035, d=.969 and group 3 (No Hypnosis) Mdiff=15.6, p=.04, d=.997 who showed no reduction in AB in the second set of trials. The AB analysis revealed a significant Intervention x Group interaction F(2,28)=5.562, p=0.009, n²p=.284

DISCUSSION

AB deficit occurs when two temporally close stimuli compete for limited attentional resources. For a long time the AB had been assumed to represent the fundamental limits of stimulus processing, that is immune to elimination with practice (Tang et al., 2013).

Slagter and collaborators (2007) found that three months of intensive mental training (meditation) reduce the AB: it increased T2 identification and also reduced brain-resource allocation to T1.

Our data indicate that post-hypnotic suggestion unconsciously alters the attentional filter in highly suggestible participants. To our knowledge this is the first experiment that demonstrates that a short hypnotic intervention increases control over the allocation of the processing resources in the AB paradigm.

REFERENCES


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