

ALLOCATION OF ATTENTIONAL RESOURCES IN POSTHYPNOTIC SUGGESTION¹

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Abstract: Highly hypnotizable subjects received a nonhypnotic instruction to respond to a particular digit in a display and a posthypnotic suggestion to respond to a different digit. On some test trials, these 2 responses were tested separately; on others, they were placed in conflict. Overall, subjects were no more responsive to posthypnotic cues than to nonhypnotic cues, nor did their response latencies differ. However, response to posthypnotic cues diminished when they conflicted with the nonhypnotic cues. Analysis of response latencies showed that posthypnotic responding interfered with nonhypnotic responding (and vice versa), even on those trials where there was no procedural conflict. Posthypnotic behavior is not inevitably evoked by the presentation of the prearranged cue. Furthermore, the interference between posthypnotic and nonhypnotic responses indicates that posthypnotic responding consumes attentional resources. Both findings indicate that posthypnotic behavior is not automatic in the technical sense of that term.

Posthypnotic suggestion occurs when a subject acts, after hypnosis has been terminated, on a suggestion administered during hypnosis.

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Upon presentation of the prearranged cue, highly hypnotizable subjects typically interrupt their ongoing activities to make the suggested response, without being aware of what they are doing or—when the posthypnotic suggestion is accompanied by a further suggestion for posthypnotic amnesia—why. Observation of posthypnotic responding in Charcot's and Bernheim's clinics led Freud to formulate his concept of a dynamic unconscious: ideas and impulses, denied to conscious awareness, that nonetheless influence ongoing experience, thought, and action.

For subjects and observers alike, posthypnotic behavior appears to be automatic, quasi-compulsive, and irresistible (for early reviews, see Barber, 1962; Barnier, 1999; Erickson & Erickson, 1941; Orne, 1969; Sheehan & Orne, 1968). However, in hypnosis appearances may be deceiving, and it remains an open question whether response to posthypnotic suggestion is as automatic as it seems to be. Fortunately, cognitive psychology has evolved a technical distinction between automatic and controlled processing that forms a template against which posthypnotic suggestion can be compared (LaBerge & Samuels, 1974; Posner & Snyder, 1975; Schneider & Shiffrin, 1977; Shiffrin & Schneider, 1977; for more recent developments, see Kihlstrom, 2008a; Moors & DeHouwer, 2006). According to this definition, automatic processes are inevitably evoked by the presentation of some critical stimulus; once engaged, they proceed inevitably to their conclusion, in a ballistic fashion; their execution consumes little or no cognitive resources; and they do not interfere with other ongoing processes. There is some debate over whether each of these four features must be present to identify a process as automatic and whether the features should be regarded as varying along a continuum as opposed to discrete, all-or-none, in nature. But, to the extent that any phenomenon possesses these four features, it may be regarded as relatively automatic.

With respect to inevitable evocation and incorrigible completion, early anecdotal and experimental evidence that posthypnotic suggestions can persist over even very long periods of time (Edwards, 1963, 1965c; Erickson & Erickson, 1941; Kellogg, 1929; Patten, 1930) support the notion that they are executed automatically—as does the observation that subjects who fail an initial test of a posthypnotic suggestion appear to show a tendency to perform the suggested behavior at a later time (Nace & Orne, 1970). Posthypnotic persistence is widely variable, however, even among subjects who have been selected for high hypnotizability (Barnier & McConkey, 1998a; K. S. Bowers & Breneman, 1981; Edwards, 1963, 1965b, 1965c). And even the initial response to a posthypnotic suggestion depends not just on the subject's level of hypnotizability (Barnier & McConkey, 1998b) but also on the subject's motivational state (Edwards, 1965a), expectations (Gandolfo, 1971), and interpretation of the hypnotist's suggestion (Barnier & McConkey,

1999a, 2001). Nor is there any evidence that posthypnotic suggestions are more powerful, as a means of controlling behavior, than nonhypnotic suggestions (Barnier & McConkey, 1998a; Damaser, Whitehouse, Orne, Orne, & Dinges, 2010; Hoyt, 1990, Experiment 1; Orne, 1970).

Of particular relevance is the literature on the occurrence of posthypnotic behavior outside the experimental setting in which the suggestion is administered. An early experiment by Fisher (1954) appeared to demonstrate that subjects responded to posthypnotic suggestions only so long as they believed that the experiment was still in progress and that they were being observed by the hypnotist (see also Barber, 1958). Although a subsequent study by Orne, Sheehan, and Evans (1968) found that hypnotic subjects were more likely than simulators to respond to posthypnotic suggestions outside the experimental context, the fact remains that such responses are far from inevitable, and posthypnotic behavior is much more likely to occur when tested in situations that resemble those in which the suggestion was initially given (Barnier & McConkey, 1998a; Spanos, Menary, Brett, Cross, & Ahmed, 1987; St. Jean, 1978). Thus, response to posthypnotic suggestion is far from inevitable and incorrigible.

The remaining two elements of automaticity, effortless execution and parallel processing, are related: In principle, automatic processes do not interfere with other ongoing processes precisely because they do not consume attentional resources that are required by these other processes. However, there is little experimental literature on this aspect of automaticity, as it applies to posthypnotic suggestion. Barnier and McConkey (1999b) found that response to a complex posthypnotic suggestion was far less likely than to a simple one, which is consistent with the idea that posthypnotic response consumes attentional capacity (see also Wyzenbeek & Bryant, in press). As in an early experiment by Messerschmidt (1927–1928; see also Hull, 1933), two studies from Hilgard's laboratory found that posthypnotic suggestion interfered with performance on a color-naming task (Knox, Crutchfield, & Hilgard, 1978; Stevenson, 1976). Interestingly, both Stevenson and Knox found that posthypnotic suggestion *increased* interference, compared to a nonhypnotic control condition. By contrast, K. S. Bowers and Brennehan (1981) found a reduction in interference when a very easy posthypnotic suggestion was performed simultaneously with a nonhypnotic task.

In all of these experiments, the simultaneous tasks were quite different in nature. In the Messerschmidt experiment (1927–1928), for example, written addition was performed simultaneously with oral reading of words. Moreover, there was no necessary conflict between them, because they employed different response modalities, writing and speaking. In the present research, we addressed the issue of attentional capacity directly by testing a posthypnotic suggestion in parallel

and in conflict with a nonhypnotic instruction of identical form. When two responses are cued and only one response can be given, one of them must win out over the other. But when both responses are possible, any interference of one with the other can be employed as an index of automaticity.

METHOD

Subjects

From a large pool of college students tested on the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A; Shor & Orne, 1962) and the Stanford Hypnotic Susceptibility Scale, Form C (SHSS:C; Weitzenhoffer & Hilgard, 1962), 12 subjects were selected who scored 11–12 on SHSS:C, thus falling in the range of very high hypnotizability (Register & Kihlstrom, 1986). All subjects had responded positively to the posthypnotic suggestion item of HGSHS:A and the posthypnotic amnesia item of SHSS:C. Upon recruitment, the subjects were told that the experiment would involve both hypnosis and a computer task testing visual perception. In return for their participation in this experiment, subjects received either research credit in their introductory psychology course or a modest cash payment.

Procedure

Subjects were tested individually. A personal computer was used to test subjects' responsiveness to posthypnotic suggestion and nonhypnotic instruction, recording response choices and response latencies. The subjects were first familiarized with the computer task, which was introduced as a "test of ability to detect and recognize visual patterns." They were told that three 3-digit strings would appear simultaneously on the computer screen, for example:

364 210 719.

Their task was to press one of three response keys (left, middle, or right) corresponding to the particular string in which the target digit, 7, appeared. The subjects were also informed that the presentations would be very brief, so that they would probably not respond correctly to all of the presentations but that they should respond as quickly and as accurately as possible and guess if not sure.

The subjects were given two practice trials followed by 20 test trials (including two catch trials that did *not* contain the digit 7). The catch trials were intended to promote vigilance and to provide a ready attribution of "task difficulty" for any anomalous responses that might follow during posthypnotic responding. Each stimulus was displayed

for 375 milliseconds, followed by a blank screen for up to 5,000 milliseconds. If the subject responded, the next trial began immediately.

All subjects were then hypnotized using an induction procedure adapted from the SHSS:C. Following a series of representative hypnotic suggestions, they received a posthypnotic suggestion that conflicted with the previous nonhypnotic instruction:

After you awaken, you will be asked to do the computer task again. This time, however, instead of pressing the key that corresponds to the string of digits that has the digit 7 in it, press the key that corresponds to the position in which the digit 3 occurs. . . . You will press the key that corresponds to the position in which the 3 occurs, but you will not remember that I have told you to do so. You will press the corresponding key each time you see a 3, but you will forget that I have told you to do so, until I say: "Now you can remember what I told you earlier."

For half of the subjects, key-pressing was contingent on the digit 3; for the other half it was contingent on the digit 5.

After hypnosis was terminated, the subjects were tested for amnesia by a request to recall the events of the hypnotic session. The experimenter then said, "OK, let's do the computer task again," and a nonhypnotic instruction was given following the form of the previous instructions:

The computer task you are asked to do now is identical to the one you did earlier. . . . This time, however, instead of pressing the key that corresponds to the string of digits that has the digit 7 in it, press the key that corresponds to the position in which the digit 5 occurs. . . . You will press the key that corresponds to the position in which the 5 occurs. You will press the corresponding key each time you see a 5.

For the subjects who had received the posthypnotic suggestion for the digit 5, nonhypnotic key-pressing was contingent on the digit 3, and vice versa. The two relevant digits were thus counterbalanced, so that each served both as a cue for posthypnotic suggestion and a nonhypnotic instruction, controlling for possible confounding of digit and suggestion condition.

The computer then presented each subject with four types of trials, in which (a) the posthypnotic cue appeared in one of the digit strings; (b) the nonhypnotic cue appeared in one of the digit strings; (c) *both* cues appeared, each in different digit strings; and (d) neither cue appeared. There were 18 trials of each type, presented in random order. Each cue appeared equally often in the left, middle, and right digit string within each of the cue-present conditions. The serial position of the cues within the digit strings was random, and all noncue digits were in randomly selected order. In addition, for each item, any second key-pressing response that occurred within the 5,000-millisecond window was also

recorded. Each subject thus received both a posthypnotic suggestion and a nonhypnotic instruction and was presented with opportunities to respond to cues for each, when the cues co-occurred in the conflict condition, and when they were presented separately in the no-conflict conditions. Following the second computer task, subjects were questioned about their experiences in a semi-structured posttest interview. Amnesia was then reversed by the prearranged cue, and the subjects were asked to recall the posthypnotic suggestion. The interview was repeated, after which the subjects were debriefed and dismissed.

Although this experiment was conceived as a within-subjects comparison of posthypnotic behavior under conflict and no-conflict conditions, we thought it would be useful to observe the performance of nonhypnotic subjects under comparable conditions. For this purpose, two groups of 12 subjects, unselected for hypnotizability, received comparable instructions but without the induction of hypnosis or, of course, suggestions for posthypnotic response or posthypnotic amnesia. Subjects in Group A were instructed to try to divide their attention evenly between the 3 and the 5, while those in Group B were given no instruction for divided attention. Because the two groups did not differ significantly in terms of either accuracy or latency, they were combined into a single nonhypnotic comparison group of 24 subjects.

RESULTS

All hypnotic subjects showed amnesia for the posthypnotic suggestion and thus were retained for data analysis. No subject made more than one response in the no-conflict conditions, and only 1 subject gave more than one response in the conflict condition—and for only 2 of the 18 trials. In those instances, only the first response was counted.

Hypnotic Subjects

Table 1 shows response rates and response latencies to the posthypnotic and nonhypnotic cues. Overall, there were no differences in response to the posthypnotic suggestion and nonhypnotic instruction. In the no-conflict condition, the subjects responded to an average of 77% of the posthypnotic cues and 74% of the nonhypnotic cues. In the conflict condition, they responded to an average of 49% of cues of each type. Neither difference approached statistical significance; both $t_s < 1$. Because subjects could make only one response, the drop in response rate between the no-conflict and conflict conditions was built into the design. Interestingly, there were no significant differences in response latencies between posthypnotic and nonhypnotic cues: no-conflict condition, $F < 1$; conflict condition, $F(1, 11) = 1.17, ns$.

Table 1
Response Rates and Response Latencies for Hypnotic and Nonhypnotic Subjects

Cue Type	Condition			
	No-Conflict		Conflict	
	Posthypnotic	Nonhypnotic	Posthypnotic	Nonhypnotic
Hypnotic subjects				
Response rate	77%	74%	49%	49%
Response latency ^a	1058	1075	869	1009
Nonhypnotic subjects				
Response rate	92%	94%	49%	50%
Response latency ^a	865	917	785	755

^aIn milliseconds.

Response to the posthypnotic cue was negatively correlated with response to the nonhypnotic cue. This is not surprising in the conflict condition (Figure 1; $r = -.99$, $p < .001$), where only one response was possible but was also true in the no-conflict condition (Figure 2; $r = -.69$, $p < .001$), where response to one cue did not necessarily preclude response to the other. Thus, there was a tradeoff between the posthypnotic suggestion and the nonhypnotic instruction, regardless of whether these were in conflict.

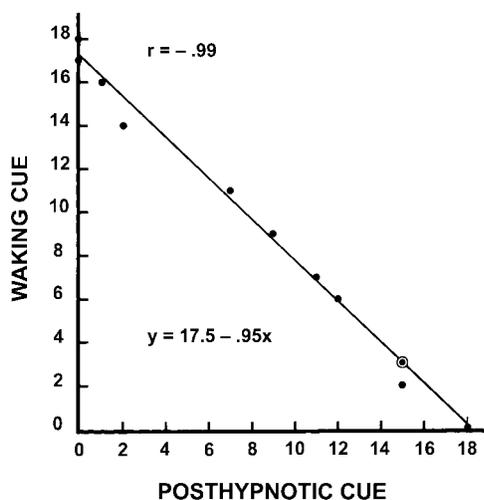


Figure 1. Response to posthypnotic and nonhypnotic cues in the conflict condition.

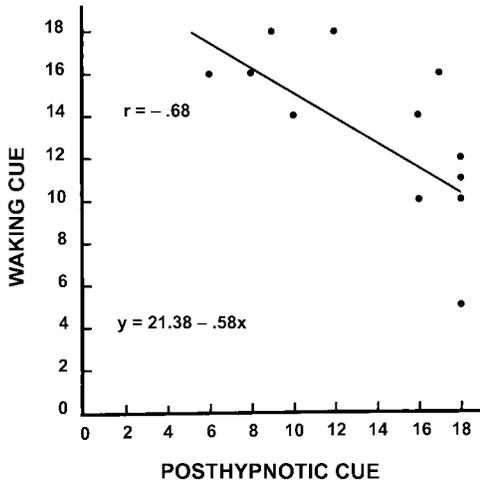


Figure 2. Response to posthypnotic and nonhypnotic cues in the no-conflict condition.

The subjects varied greatly in their responsiveness to both the posthypnotic suggestion and the nonhypnotic instruction. Despite being selected for very high levels of hypnotizability, individual subjects fell along the entire range of bias, from favoring the posthypnotic cue to favoring the nonhypnotic one; no subject responded in a completely unbiased manner, even in the no-conflict conditions. Response in the conflict condition was almost perfectly correlated with response in the no-conflict condition, $r = .96$, $p < .001$. That is, those subjects who favored the posthypnotic cue when it conflicted with the nonhypnotic cue also favored it when it did not, and similarly for the nonhypnotic cue.

The subjects were grouped according to their overall cue preference for an analysis of response latencies (3 subjects who did not respond at all to one type of cue or the other in the conflict condition were assigned a response latency in that condition equal to their own average latency to their preferred cue). The response latencies were submitted to a $2 \times 2 \times 2$ mixed-design analysis of variance with one between-subjects factor (cue preference) and two within-subjects factors (posthypnotic vs. nonhypnotic cue, and conflict vs. no-conflict condition). There was no significant difference in overall response latency between those subjects who were biased toward the posthypnotic cue and those who were biased toward the nonhypnotic cue; nor was there a significant difference in latency between posthypnotic and nonhypnotic cues (both $F < 1$). There was, however, a significant two-way interaction between cue preference and cue type, $F(1,10) = 9.86$, $p < .05$, such that

subjects responded more quickly to their preferred cue than to their nonpreferred cue.

Nonhypnotic Condition

The un hypnotized comparison subjects showed the same pattern of behavior as the hypnotic subjects (see Table 1). Because these subjects differed from the hypnotic subjects in so many ways (high vs. undetermined hypnotizability; induction of hypnosis; administration of the posthypnotic suggestion; amnesia for one of the competing responses), most comparisons between them are ambiguous. It is perhaps interesting to note that the comparison group responded to significantly more cues in the no-conflict condition than did the hypnotic group, $t(34) = 5.90$, $p < .001$; there was no difference between the two groups in the conflict condition, $t(34) = 1.42$, *ns*. Response latencies were significantly shorter in the comparison group: no-conflict condition, $t(34) = 2.17$, $p < .05$; conflict condition, $t(34) = 2.63$, $p < .05$.

Levene's test for equality of variances showed that the comparison group was less variable in its behavior than was the posthypnotic group: no-conflict condition, $F(1, 34) = 8.74$, $p < .01$; conflict condition, $F(1, 34) = 11.47$, $p < .01$.

The most important comparison between the two conditions concerns interference. Again, in the conflict condition the tradeoff between the two instructions was built into the design, $r = -.98$ (4 subjects responded equally to each cue). In contrast to the hypnotic group, however, the tradeoff in the no-conflict condition was not significant, $r = -.20$. The difference between the two correlations was not significant, however, $z = 1.62$.

Postexperimental Interviews

Although every hypnotic subject reported amnesia for the posthypnotic cue, all but 1 reported some confusion or doubt, during the second computer test, as to whether they were performing the task correctly. All thought that the second test was harder than the pretest; although they offered varying attributions for their difficulties. Nine of the 12 subjects thought they had forgotten or had become confused about which number they were supposed to be searching for. Seven subjects thought that the cues were displayed for a shorter period of time, and 2 subjects claimed that 3s and 5s looked similar and so both "stood out." Three reported difficulty in preventing "accidental" key presses. Many subjects showed nonverbal signs of agitation during the test, including shifting in their chairs, sighing, and facial expressions.

By contrast, few comparison subjects (only 4 out of 24) found the test in any way confusing. Most experienced the test as more difficult than

the pretest, but most of these (15 of the 19) attributed this simply to the requirement to search for more than one target.

None of the hypnotic subjects reported making a conscious decision, at the time of receiving the nonhypnotic instructions that conflicted with the posthypnotic suggestion, to respond to one as opposed to the other. Of course, because all of these subjects were amnesic for the posthypnotic suggestion itself, they were unaware of this conflict—both at the time the conflict was set up and at the time they responded to the two categories of cues. This situation is distinct from other conflictual situations (e.g., Sheehan, 1971) where, because the subjects are not amnesic, they are aware of the conflict at the time it occurs.

DISCUSSION

When a posthypnotic suggestion is put into direct conflict with a nonhypnotic instruction of the same kind, it is no surprise that one interferes with the other—though it is interesting to observe that the posthypnotic suggestion did not by any means dominate behavior. The critical observation in this experiment was that posthypnotic and nonhypnotic responding interfered with each other even when the two did not conflict. Subjects responded to the posthypnotic suggestion at the expense of the nonhypnotic instruction and vice versa. Very little interference of this sort was observed among the un hypnotized comparison subjects. A follow-up experiment, substituting a category judgment task for the digit-detection task, yielded similar results (Hoyt, 1990, Experiment 3).

Taken together with previous research, the findings of this experiment indicate that posthypnotic responses are not performed automatically, in the technical sense that this term has in cognitive psychology. It was already clear that they are not inevitably evoked by the presentation of the prearranged cue—especially when the cue is presented in a different environmental context. The present study puts another perspective on this point, in that even highly hypnotizable subjects did not respond to each and every posthypnotic cue, even when tested within the experimental session, and some even showed a bias toward the nonhypnotic cue. Moreover, it seems clear that execution of a posthypnotic suggestion interferes with ongoing nonhypnotic behavior even when the two activities are procedurally independent of each other. Of course, the evidence for this interference is correlational, so it may be that it is the nonhypnotic activity that is interfering with the posthypnotic suggestion. In either case, the fact of interference makes it clear that executing a posthypnotic suggestion consumes attentional resources.

In fact, far from decreasing the consumption of attentional resources, posthypnotic suggestion may have increased it to some extent, because the correlation representing the tradeoff for the hypnotic subjects was numerically, if not statistically, greater than that for the nonhypnotic subjects. This increase in interference during the execution of a posthypnotic suggestion has also been observed in other studies (e.g., Knox et al., 1978; Stevenson, 1976). It is possible that this increased interference reflects the additional cognitive demands of maintaining (or monitoring) posthypnotic amnesia. On the other hand, hypnotic amnesia does not appear to involve the kind of cognitive effort characteristic of conscious thought suppression (K. S. Bowers & Woody, 1996). And hypnotic analgesia, a perceptual phenomenon that is analogous to posthypnotic amnesia, does not appear to consume additional cognitive resources either (Miller & Bowers, 1986, 1993). Posthypnotic suggestion need not be accompanied by posthypnotic amnesia (Barnier & McConkey, 1999b; Edwards, 1965b; Gandolfo, 1971), so the role of amnesia in the increased interference remains a topic for future investigation. An alternative possibility is that the increased cognitive demand reflects subjects' surprise at, and attempts to cope with, the intrusion of the posthypnotic response into their stream of ongoing conscious activity.

The conclusion that posthypnotic responses are not automatic in the technical sense of the term does not contradict hypnotic subjects' experience of involuntariness, which has long been regarded as one of the core features of both hypnotic and posthypnotic behavior (K. S. Bowers, 1981; P. Bowers, 1982; P. Bowers, Laurence, & Hart, 1988; Farthing, Brown, & Venturino, 1983; Shor, 1959, 1962, 1979; Weitzenhoffer, 1974, 1980; for an overview, see Kihlstrom, 2008b). It simply means that the experience of involuntariness is in some sense illusory and not a reflection of true automaticity. This would seem to contradict the social-cognitive view of hypnosis proposed by Kirsch and Lynn (Kirsch, 2001; Kirsch & Lynn, 1998a, 1998b, 1999; Lynn, Kirsch, & Hallquist, 2008) who have revived Arnold's (1946) theory of ideomotor action to suggest that hypnotic suggestions automatically generate corresponding responses in a context of positive response expectancies.

On the other hand, the fact that posthypnotic responses are not generated automatically is consistent with a wide variety of other theoretical approaches to hypnosis. For example, Spanos suggested that subjects' reports of involuntariness are part of a self-presentation strategy intended to convince observers that they really are hypnotized (Spanos, Cobb, & Gorassini, 1985) or reflect self-deception on the part of subjects, who mistakenly attribute their behavior to external rather than internal factors (Spanos, Lush, Smith, & DeGroh, 1986). Hilgard's neodissociation theory of divided consciousness (Hilgard, 1977) suggests that hypnotic and posthypnotic responses appear to be automatic

and involuntary because the cognitive module that executes hypnotic suggestions does so outside of conscious awareness (Kihlstrom, 1992, 1998). And dissociated control theory (Woody & Bowers, 1994; Woody & Sadler, 1998, 2008; see also Bayne, 2007; Haggard, Cartledge, Dafydd, & Oakley, 2004) draws on neuropsychological research and theory to propose that hypnosis alters the functioning of prefrontal executive control subsystems so that hypnotic responses are generated involuntarily even if they are not technically automatic, in that these involuntary responses nonetheless consume cognitive capacity. It is probably a mistake to use the terms *involuntary* and *automatic* as if they were interchangeable: Automatic responses are involuntary by definition, but actions experienced as involuntary may not be automatic. This appears to be the case with response to posthypnotic suggestions.

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Nutzung von Aufmerksamkeitsressourcen bei posthypnotischen Suggestionen

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Abstract: Hoch hypnotisierbare Probanden erhielten eine nicht-hypnotische Anweisung, auf eine spezifische Ziffer auf einer Anzeige zu reagieren, sowie eine posthypnotische Suggestion, auf eine andere Ziffer zu reagieren. Während einem Teil der Durchläufe wurden diese 2 Antworten gesondert getestet; dagegen wurden diese in den anderen Durchläufen gemeinsam getestet. Insgesamt waren die Probanden für posthypnotische Hinweise nicht etwa reagibler als für nicht-hypnotische Hinweise, ebenso wenig gab es Unterschiede in den Antwortlatenzen. Jedoch nahm die Antwortrate auf posthypnotische Hinweise ab, wenn sie mit nicht-hypnotischen Hinweisen in Konflikt gerieten. Eine Analyse der Antwortlatenzen zeigte, dass das posthypnotische Antwortverhalten mit dem nicht-hypnotischen Antwortverhalten interferierte und umgekehrt, und dies sogar in jenen Durchgängen, in denen es keinen prozeduralen Konflikt gab. Posthypnotisches Verhalten wird nicht zwangsläufig durch die Darstellung des vorher vereinbarten Hinweises hervorgerufen. Weiterhin deutet die Interferenz zwischen posthypnotischen und nicht hypnotischen Antworten darauf hin, dass posthypnotische Antworten Aufmerksamkeitsressourcen benötigen. Beide Befunde zeigen an, dass posthypnotisches Verhalten in diesem Fall technisch gesehen nicht automatisch abläuft.

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Affectation des ressources attentionnelles dans la suggestion post-hypnotique

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Résumé: Des sujets hautement hypnotisables ont reçu l'instruction non-hypnotique de réagir à un chiffre particulier parmi une série qui leur était présentée, et la suggestion post-hypnotique de réagir à un chiffre différent du premier. Dans le cadre de certains essais, ces deux réactions ont été testées séparément; dans d'autres, elles ont été placées en relation de conflit. Dans l'ensemble, les sujets n'étaient pas plus sensibles aux suggestions post-hypnotiques qu'aux suggestions non-hypnotiques, et la latence de réponse était la même. Cependant, la réaction aux suggestions post-hypnotiques était moins évidente lorsqu'elle entraînait en conflit avec les suggestions non-hypnotiques. Une analyse des latences de réponse a démontré que la réaction post-hypnotique faisait obstacle à la réaction non-hypnotique (et vice-versa), et ce, même en l'absence de conflit procédural durant les essais. La présentation de la suggestion d'un choix suggéré n'évoque pas inévitablement un comportement post-hypnotique. De plus, l'interférence des réactions post-hypnotique et non-hypnotique montre que la réaction post-hypnotique consomme des ressources attentionnelles. Ces deux résultats indiquent qu'au sens strictement technique, le comportement post-hypnotique n'est pas automatique.

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Distribución de los recursos atencionales en la sugestión posthipnótica

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Resumen: Dimos una sugestión no hipnótica a personal altamente hipnotizables para que respondieran a un dígito particular en una pantalla y una sugestión post-hipnótica para que respondieran a otro dígito. En algunas corridas, dimos estas dos respuestas por separado; en otras, estuvieron en conflicto. En general, los participantes no respondieron más a las señales posthipnóticas que a las no hipnóticas ni sus latencias de respuesta difirieron. Sin embargo, la respuesta a las señales posthipnótica disminuyeron cuando entraban en conflicto con las señales no hipnóticas. El análisis de las latencias de respuesta demostró que la respuesta posthipnótica interfirió con la no hipnótica (y viceversa), incluso en las pruebas en las que no había conflicto entre los procedimientos. El comportamiento post-hipnótico no es inevitablemente evocado por la presentación de la señal pre-establecida. Por otra parte, la interferencia entre las respuestas posthipnótica y no hipnótica indica que la respuesta post-hipnótica consume recursos atencionales. Ambos resultados indican que el comportamiento posthipnótico no es automático en el sentido técnico del término.

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