

DISCUSSION COMMENTARY

THE AMNESIA-PRONE SYNDROME: BRAIN STATE OR CULTURAL ROLE?

Graham F. Wagstaff

Department of Psychology, University of Liverpool, UK

The idea that to understand hypnotic responding we must encompass individual differences has long been central to many writers of both sociocognitive and state/dissociationist traditions (for example, Hilgard, 1970; Sarbin and Coe, 1972); however, Barber's (1999) theory is particularly important and innovative in that it attempts to provide an approach that will integrate various theoretical viewpoints and resolve some of the most fundamental controversies in the area. Nevertheless, before we can conclude that the three groups identified by Barber can help constitute a comprehensive theory, a number of important issues remain to be addressed.

How many categories?

Barber asserts that his three-category typology is corroborated by the work of Barrett and Pekala. Barrett (1996), however, identified only two groups of 'highs', dissociators and fantasizers; she did not, therefore, isolate a group of 'positively set' highs, who should have formed the largest group, according to Barber. Moreover, a closer look at Pekala's data shows that things are not as clear-cut as they might at first seem.

In his 1991 paper, Pekala identified two categories of highs. One group, the 'classic highs' as he called them, reported alterations in awareness, memory and so on; the other group, the 'fantasy highs', reported more vivid imagery, but fewer alterations in consciousness and experience. In a second paper, Pekala, Kumar and Marcano (1995) again identified two clusters or categories; the 'classic highs' (n=33) appeared again, but this time a new group emerged, and these they labelled 'compliant highs' (n=8). The latter group, they argued, were essentially similar to the fantasy highs in the first study, but reported less vivid imagery.

Pekala's studies are problematic for Barber's conceptualization for two main reasons. First, Pekala et al. report being unsure as to whether there are three groups, or two; they acknowledge the three-group categorization may be a chance occurrence (see Pekala et al., 1995: 198). Second, in both of Pekala's studies, the 'classic highs' (whom Barber identifies with amnesia-prone subjects) were by far the largest group of highly susceptible subjects. This again contrasts with Barber's proposal that the majority of 'highs' are neither fantasy- nor amnesia-prone, but are 'positively set' (p.27). If Pekala et al.'s 'compliant highs' are, indeed, as Barber claims, the 'positively set', they seem to be rather more elusive than Barber predicts, being non-existent in Pekala's first study, and in a minority in the second.

Also, it is difficult to accept Barber's proposal that in more than three decades of research on literally thousands of subjects, because we have concentrated predominantly on student samples, sociocognitive researchers such as Spanos, Coe and myself

have investigated solely what Barber terms the 'positively set', and missed the amnesia-prone. In fact, both Barrett and Pekala conducted their research solely on undergraduate college students.

In sum, at this stage, the empirical evidence for the existence of the three groups of highs specified by Barber seems to be far from conclusive.

Are the categories separate or hierarchical?

Another problematic issue concerns the organization of categories. Barber claims that the 'positively set' exist as a separate category from the fantasy-prone, yet he also argues that, 'The failure of 20% of Lynn and Rhue's fantasy-prone subjects to meet criteria for high hypnotic susceptibility could be due to possible negative attitudes, motivations, or expectations toward the idea of hypnosis or toward the particular situation with the particular hypnotist ...' (p.24). This implies that the most logical categorization is not one which differentiates between fantasy-prones and the positively set, but sees both fantasy-prones and non-fantasy-prones as subcategories of the positively set. In other words, arguably the most fundamental prerequisite for all hypnotic responding is still that proposed by Barber himself, and others such as Spanos, in the 1960s and early 1970s – that is, that subjects have positive, or at least not negative, 'attitudes, motivations, or expectations toward the idea of hypnosis or toward the particular situation with the particular hypnotist'; without these, no one responds (see, for example, Barber, Spanos and Chaves, 1974). Indeed, Barber partly acknowledges this later in his paper, although he rejects the idea that talented individuals need to be especially motivated. However, the question of whether fantasy-prone highs are, or need to be, less motivated to respond, is an empirical one which remains to be addressed at more than an anecdotal level.

But how do amnesia-prones fit in with all this, assuming such a group can reliably be isolated? From what I can gather, Barber assumes that amnesia-prones do not need to be especially 'positively set' because they have the capacity to enter a particular altered state of consciousness or brain state in which many hypnotic phenomena more or less spontaneously occur. This would also fit with the amnesia-prones' claim that their responsiveness was due more to the skill of the hypnotist than to their own abilities. Moreover, presumably, this state can occur spontaneously in contexts not explicitly or implicitly understood by the subject as 'hypnosis'. If this what Barber is actually proposing, it is certainly an interesting hypothesis, but one that seems to revive many of the traditional problems relating the concept of hypnosis as a special trance state.

Reconsidering the amnesia-prone

All practitioners of hypnosis are familiar with the occasional subject who becomes so relaxed during the induction that she literally almost dozes off (and, consequently, looks lethargic, loses muscle tone, speaks slowly and so on), and it is obviously compatible with the standard psychological literature on memory to argue that such a person may be so engrossed, sleepy, 'entranced', or whatever, that she simply does not encode information adequately, or fails to use retrieval cues to extract it. Consequently, in some subjects, spontaneous amnesia may indeed reflect a true absence of memory for very obvious reasons; the information was never coded, or the person cannot summon the energy to retrieve it. Also, if people are especially prone

to memory lapses in their everyday lives, or are well practised at thought suppression, one would not be surprised if they were to show similar effects on memory tests in contexts defined as hypnosis.

But the amnesia-prone person described by Barber seems to be not someone who fails to remember because he or she simply half asleep, relaxed or not attending; instead, the category described by Barber here seems to refer to those who manifest the traditional profound stereotypical phenomena associated with the 19th-century hypnotic 'somnambule'; that is, along with total hypnotic amnesia, they need a formal induction, feel controlled by the hypnotist, look lethargic, speak slowly, and yet, at the same time, are able to show hidden observers, and respond to a variety of suggestions including reporting real as real hallucinations that can surprise them enough that they need reassurance. Indeed, most of Barrett's (1996) dissociaters (whom Barber terms amnesia-prone) claimed to have real as real hallucinatory responses of such intensity under hypnosis that they did not realize that they were hallucinations. Yet, at the same time, they reported little and sometimes no use of imagery in their everyday lives. Thus, if the amnesia-prone syndrome is to be identified with a brain state, it seems to be a rather special and unusual state.

However, the main question mark over all this is that there is a growing body of evidence that the most profound manifestations of the 'somnambule' or hypnotic virtuoso stereotype may have questionable validity. Thus hypnotic virtuosos are typically those individuals most likely to fake negative hallucinations, and retrospectively change their accounts of their experiences to fit in with experimental demands (see, for example, Spanos, 1991, 1992; Perlini, Spanos and Jones, 1996). Also, the profound 'somnambule' stereotype is a favourite among simulators (see Martin and Lynn, 1995).

Another equally if not more viable possibility, therefore, would be to view the amnesia-prone syndrome as a cultural role enactment; that is, subjects enact the role of the amnesia-prone individual and display amnesia, lethargy, suggestibility, automatism and so on in accordance with their expectations about how hypnotized individuals should seem, and what they should experience. As such, we could incorporate the amnesia-prone syndrome into the 'positively set' scheme also; that is, amnesia-proneness is a culturally generated role, but one that comes more naturally to those who have positive attitudes and motivations towards, and have, or claim, experience in generating the phenomena generally associated with the syndrome.

Indeed, arguably, viewed as a role-enactment, some of the amnesia-prones' behaviour makes more sense; for example, in response to a fly hallucination, most amnesia-prones apparently claim that they thought the fly was real, and are surprised at their responses. The proposed explanation for this is that they 'forgot' the hypnotist's suggestions. However, given that the standard hallucinated fly item involves giving relevant verbal suggestions before, during and after the hallucination, this seems rather unlikely. In fact, as they claim no special powers of imagery in their everyday lives, it is not clear why amnesia-prones should be capable of vivid hallucinations at all. Nevertheless, claiming real as real hallucinations is very much in line with the role of traditional hypnotic somnambule, and, significantly, according to McConkey and Sheehan's (1995) recent text on hypnosis in criminal investigation, showing surprise at suggested responses is identified as an indicator of 'faking hypnosis' (as is a lack of imaginative involvement in age regression, also proposed by Barber as a characteristic of the amnesia-prone).

One can note that Kunzendorf and Boisvert's (1996) physiological findings also cast doubt on the validity of hallucinations reported by those reporting hidden observers, another alleged characteristic of the amnesia-prone. Thus Kunzendorf and Boisvert found that those classified as dissociaters who first claimed to be deaf but then reported 'hidden observers' who could hear, showed no physiological evidence of being able to achieve a state of deafness at any stage. In contrast, those classified as vivid imagers did not show hidden observers, but were capable of generating imagery sufficient to combat auditory stimuli (this was physiologically verifiable). Similarly, a number of studies have shown that even profound amnesia can be breached in highly hypnotizable subjects if contextual influences make amnesia reversal consistent with enacting the role of an excellent hypnotic subject (see Coe, 1979; Spanos, 1991). Without empirical evidence to the contrary, the argument that all the subjects in such studies were simply 'positively set', and none was 'amnesia-prone', is surely question begging.

All this fits my own experience, in that the 'deep trance' somnambule stereotype, displaying lethargy, slow speech and total spontaneous amnesia, is most likely to manifest itself in somewhat questionable circumstances; for example, subjects are more likely to behave in this stereotypical fashion following hypnotic regression to past lives, and at intervals during and after extravagant performances of stage hypnosis. It does not surprise me, therefore, that Barber suggests a possible connection between amnesia-proneness and that most dubious of roles, 'mediumship', or that such individuals claim that their special experiences are not due to such mundane processes as imagination or cognitive strategies. If subjects wanted to comply with the traditional stereotype of the hypnotic automaton, one would not expect them to admit to mundane fantasy or strategic enactment.

The alleged relationship between amnesia and abuse trauma in the 'amnesia-prone' is also potentially problematic. A major problem for many, perhaps most, victims of abuse trauma, is not that they cannot remember what happened; rather, they remember it all too clearly. Their difficulty is coming to terms with their experiences. It is a matter of some contention, therefore, whether unusual episodic memory loss after trauma should best be construed as a fairly transparent strategic manoeuvre (there are periods in their life that victims would rather not think and talk about), rather than some kind of involuntary dissociative process akin to repression. It is also perhaps revealing that Barrett (1996) found that the rate of reports of abuse in her 'dissociaters' increased to almost 100% after a series of follow-up interviews; as no attempt was made to assess the validity of these reports, one wonders again how much response bias might have been involved here. And, even then, there are a number of variables that might link the experiences of abuse to hypnotic responding, without postulating special altered states of consciousness; for example, characteristics that have also been associated with abuse include eagerness to please, authoritarian submission and attention-seeking.

Finally, before attaching psychosomatic plasticity and other phenomena to any particular group, we need to gather extensive data on the actual incidence of such characteristics within other groups in the general population. It would be interesting to have information on psychosomatic plasticity, memories of childhood abuse and so on in what Barber calls his 'positively set' group. It should be emphasized also that, because of the problems of response bias, such data should be based on data more substantial than self-reports.

An alternative conceptualization of Barber's types

Given all of these considerations, arguably, an equally if not more viable conceptualization of classifying 'highs' might be as follows.

First, all 'highs' are 'positively set' inasmuch as they must show a willingness to think, imagine and generally go along with the hypnotist's suggestions.

Second, among the positively set we may have groups of high-imagery fantasy-prones who use their imaginative skills to report genuine experiences. However, being genuine, these experiences are not particularly fantastic.

Third, among the positively set, we also have groups of low fantasy-prones who, despite reporting little fantasy activity in their everyday lives, are, nevertheless, able to use various cognitive strategies to report veridical, but again, not unduly fantastic, experiences.

Fourth, within this positively set group, we also find classic, compliant, 'virtuosos'. These individuals may or may not be fantasy-prone, but they share in common a pronounced proclivity to grossly exaggerate their reports in accordance with stereotypical and outmoded expectations of the hypnotic role; hence, they try vigorously to enact the role of lethargic 'somnambules', and spuriously claim a range of responses including total amnesia, real as real hallucinations, surprise at their responses, feeling controlled by the hypnotist and dissociated hidden observers; in addition they deny that they use mundane imagination and cognitive strategies to enact the hypnotic role (in fact, they deny they are 'positively set'), and fill out self-report measures to fit in with role expectations (see, for example, Spanos, 1991, 1992; Wagstaff, 1991, 1996; Perlini, Spanos and Jones, 1996). Indeed, one can imagine Barber's amnesia-prones achieving very high scores on Martin and Lynn's (1995) Hypnotic Simulation Index (that is, scoring like simulators).

Conclusion

In conclusion, Barber's analysis is fascinating and thought-provoking. However, much rests on the extent to which: (a) other researchers can empirically isolate the amnesia-prone syndrome; and (b) if they can, whether this is to be construed as a culturally determined role, a brain state with a set of special identifying characteristics or an interaction between both. Most significantly, however, if the amnesia-prone syndrome as described by Barber really does exist as a brain state, then those displaying it should defy those sociocognitive paradigms devised to illustrate the predominantly role-governed nature of hypnotic responding. It will be most interesting to see how research develops.

References

- Barber TX. A comprehensive three-dimensional theory of hypnosis. In Kirsch I, Capafons A, Cardeña-Buelna E, Amigó S (eds) *Clinical Hypnosis and Self-regulation: Cognitive-behavioral Perspectives*. Washington, DC: American Psychological Association, 1999, pp.21–48.
- Barber TX, Spanos NP, Chaves JF. *Hypnotism, Imagination and Human Potentialities*. New York: Pergamon, 1974.
- Barrett D. Fantasizers and dissociators. Two types of high hypnotizables, two different imagery styles. In Kunzendorf RG, Spanos NP, Wallace BJ (eds) *Hypnosis and Imagination*. New York: Baywood, 1996, pp.123–36.
- Coe WC. Posthypnotic amnesia: theory and research. In Spanos NP, Chaves JF (eds) *Hypnosis: The Cognitive Behavioral Perspective*. Buffalo, NY: Prometheus, 1989, pp.110–48.

- Hilgard JR. *Personality and Hypnosis: A Study in Imaginative Involvement*. Chicago, IL: University of Chicago Press, 1970.
- Kunzendorf RG, Boisvert P. Presence vs absence of a 'hidden observer' during total deafness: the hypnotic illusion of subconsciousness vs imaginal attenuation of brainstem evoked potentials. In Kunzendorf RG, Spanos NP, Wallace BJ (eds) *Hypnosis and Imagination*. New York: Baywood, 1996, pp.223–34.
- Martin DJ, Lynn SJ. The hypnotic simulation index: successful discrimination of real versus simulating participants. *International Journal of Clinical and Experimental Hypnosis* 1995; 154: 338–53.
- McConkey KM, Sheehan PW. *Hypnosis, Memory, and Behavior in Criminal Investigation*. New York: Guilford, 1995.
- Pekala RJ. Hypnotic types: evidence for a cluster analysis of phenomenal experience. *Contemporary Hypnosis* 1991; 8: 95–104.
- Pekala RJ, Kumar VK, Marcano G. Hypnotic types: a partial replication concerning phenomenal experience. *Contemporary Hypnosis* 1995; 12: 194–200.
- Perlini AH, Spanos NP, Jones W. Hypnotic negative hallucinations: a review of subjective, behavioral and physiological methods. In Kunzendorf RG, Spanos NP, Wallace BJ (eds) *Hypnosis and Imagination*. New York: Baywood, 1996, pp.199–222.
- Sarbin TR, Coe WC. *Hypnosis: A Social Psychological Analysis of Influence Communication*. New York: Holt, Rinehart & Winston, 1972.
- Sheehan PW, Perry CW. *Methodologies of Hypnosis: A Critical Appraisal of Contemporary Paradigms of Hypnosis*. Hillsdale, NJ: Laurence Erlbaum, 1976.
- Spanos NP. A sociocognitive approach to hypnosis. In Lynn SJ, Rhue JW (eds) *Theories of Hypnosis: Current Models and Perspectives*. New York: Guilford, 1991, pp.324–63.
- Spanos NP. Compliance and reinterpretation in hypnotic responding. *Contemporary Hypnosis* 1992; 9: 7–14.
- Wagstaff GF. Compliance, belief and semantics in hypnosis: a nonstate, sociocognitive perspective. In Lynn SJ, Rhue JW (eds) *Theories of Hypnosis: Current Models and Perspectives*. New York: Guilford, 1991, pp.362–96.
- Wagstaff GF. Compliance and imagination in hypnosis. In Kunzendorf RG, Spanos NP, Wallace B (eds) *Imagination and Hypnosis*. New York: Baywood, 1996, pp.19–40.

Address for correspondence:

Graham F. Wagstaff, PhD
Department of Psychology,
University of Liverpool,
PO Box 147,
Liverpool L69 3BX, UK
Email: gwf@liverpool.ac.uk