THE SOCIOCOGNITIVE AND CONDITIONING AND INHIBITION THEORIES OF HYPNOSIS

Steven Jay Lynn and Sean O’Hagen

State University of New York at Binghamton, USA

Alfred Barrios has contributed a useful theory of hypnosis (Barrios, 2001), as well as a more recent commentary (Barrios, 2007a) that compares and contrasts the ‘socio-cognitive, dissociation/neo-dissociation, and response expectancy perspectives’ with his theory of hypnosis based on principles of conditioning and inhibition. All too rarely do theorists provide an analysis of their approach vis-à-vis competing accounts, so we applaud Barrios’s efforts in this regard. Our commentary will focus on his recent discussion of the sociocognitive theory of hypnosis, rather than on his observations regarding biofeedback, placebos, faith healing and other phenomena presented in a second commentary on his theory (Barrios, 2007b).

Sociocognitive theories reject the traditional view that hypnotic experiences require the presence of an altered state of consciousness. Rather, the same social and cognitive variables that determine mundane complex social behaviours are said to determine hypnotic responses and experiences. Still, sociocognitive theories of hypnosis are not monolithic, as Barrios’s commentary might be taken to imply: they are differently nuanced and variously emphasize participants’ (a) enactment of the social role of a hypnotized person (William Coe, Theodore Sarbin); (b) attitudes and beliefs about hypnosis, fantasy involvements and motivated engagement with imaginative suggestions (T.X. Barber); (c) cognitive strategies, goal-directed activities and interpretation of suggestions (John Chaves, Nicholas Spanos, Graham Wagstaff); and (d) expectancies, response sets and automatic responses in everyday actions (Irving Kirsch, Steven Jay Lynn).

Barrios distinguishes sociocognitive theory from the response set theory and the response expectancy theory of hypnosis. However, the latter perspectives sit firmly in the camp of sociocognitive theory (Lynn, Kirsch and Hallquist, 2008). Moreover, response set theory – which emphasizes the automaticity of responses – and response expectancy theory, are related yet distinct perspectives. Kirsch and Lynn (Kirsch and Lynn, 1997, 1999; Lynn, 1997) developed response set theory collaboratively as an extension of Kirsch’s (1991) response expectancy theory and Lynn’s (Lynn and Rhue, 1991) integrative model. Given that Barrios explicitly acknowledges the important role of expectancies and beliefs about hypnosis, as well as motivation and imagination, his theory falls under the broad umbrella of sociocognitive approaches, despite the fact that Barrios argues that in some circumstances, it is possible to speak of an hypnotic state.

Barrios notes that both his perspective and sociocognitive theory ‘discuss the importance of the part played by individual differences’ in responding to suggestions. However, a primary task of any theory of hypnosis is to account for individual differences in suggestibility. Barrios contends that the age of the subject and the prestige of the hypnotist in the eyes of the subject contribute to individual differences, yet are variables neglected in sociocognitive theories. It is true that participants’ age has not received much attention in sociocognitive theories; however, as a historical note, four decades...
ago, T.X. Barber (1969: 13) observed that ‘the experimenter’s prestige as a researcher or as a hypnotist’ is a key ‘experimenter variable’ in determining hypnotic responsiveness. Still, nowadays, it is widely accepted that the characteristics of the participant – for instance, imaginative suggestibility, combined with motivation and preparedness to respond (McConkey, 1991) – are far more influential determinants of responsiveness than hypnotist prestige and even the quality of the relationship. Indeed, highly suggestible participants continue to respond even when relationship rapport is seriously compromised, although individuals low in suggestibility are more sensitive to variations in the relationship (Lynn, Weekes, Brentar, Neufeld, Zivney and Weiss, 1991).

We agree with Barrios that language (and cognitive ability more generally) is a compelling reason why very young children may not respond well to hypnotic suggestions. After all, if children cannot understand the meaning, implications or intentions of a particular suggestion, it would not be surprising if their response were lacklustre or absent. However, we take issue with his claim (Barrios, 2007a: 110) that an explanation for the ‘gradual decline in suggestibility after the age of eight is that with continued increasing age the number of competing stimuli competing with a suggestion increases (that is knowledge increases with age)…’. We contend that this cannot be a viable explanation because it implies that as people accumulate more knowledge and life experiences (i.e. competing stimuli), suggestibility should decrease over the lifespan, which is not the case. Suggestibility appears to be reasonably stable and perdurable through adulthood, unless efforts are made to modify and enhance suggestibility.

Barrios contends that a second similarity between his viewpoint and the sociocognitive perspective centres on ‘goal directed fantasies’ (GDFs), defined as ‘imagined situations which, if they were to occur, would be expected to lead to the involuntary occurrence of the motor response called for by the suggestion’ (Spanos, Rivers and Ross, 1977: 211). According to Barrios, a suggestion produces the desired response by first evoking a cognitive stimulus which is associated with the response and ‘the more compatible cognitive stimuli associated with the response evoked by the suggestion, the stronger response to the suggestion’ (Barrios, 2007a: 111). However, Barrios’s position must be qualified by scientific findings. That is, the frequency and intensity of GDFs are not closely tied to suggestibility (Lynn and Sivec, 1993), and GDFs may even diminish responding to suggestions (Hargadon Bowers and Woody, 1995; Comey and Kirsch, 1999). This seems to be the case because some people adopt a passive response set – that is, they wait for an imagined event to happen (e.g. arm levitation) on its own – which virtually guarantees failure. Interestingly, compatible stimuli (i.e. imaginings consistent with suggestions) are not necessary to produce responses to suggestions: people respond to suggestions even when they intentionally generate oppositional thoughts and images (Easton and Shor, 1976; Zamansky, 1977; Ansfield and Wegner, 1996).

Barrios challenges the assertion (Kirsch and Lynn, 1995; Lynn and Sherman, 2000) that hypnotic inductions increase suggestibility to a minor degree, and defends the use of hypnotic inductions as important and ‘necessary’. Moreover, Barrios claims that some inductions are more effective than others, and that it is possible to increase the ‘effectiveness of hypnotic inductions even more’ (Barrios, 2007a: 113). Specifically, he refers to Corollaries 5 and 6, following Hypothesis III of his theory. According to Corollary 5, ‘the probability of inducing a state of hypnosis will be greater if the suggestions are given in a gradually increasing order of difficulty than if they are given in a random order’ (Barrios, 2001: 180). However, this hypothesis has been strongly disconfirmed by research (Weekes and Lynn, 1990) indicating that hypnotic responsiveness is not affected by order of suggestions, as determined by difficulty level: people are just as responsive...
when suggestions are ordered in terms of least to most difficult as when they are ordered in terms of most to least difficult. We suspect that people’s perceptions of their success in relation to their personal standards for being ‘good hypnotic subjects’ are more crucial to establishing response expectancies (see Lynn, Green, Jaquith and Gasior, 2003) and determining suggestibility than the order of difficulty of suggestions administered.

Barrios further claims (Corollary 6) that ‘an hypnotic state can be facilitated if, along with each of the first few suggestions given in hypnotic induction, the actual sensory stimuli which would ordinarily evoke these suggested responses accompany the suggestions without the subject’s knowledge’ (Barrios, 2001: 180). This assertion finds support in research (Wilson, 1967; Wickless and Kirsch, 1989) showing that such surreptitious experimental manipulations, which alter the environment to make it seem that participants respond to suggestions (e.g. a diffuse red light appears when participants receive a suggestion to see a red light), increase hypnotic suggestibility. However, Barrios conflates what most workers in the field regard as an hypnotic induction with a manipulation of the environment that confirms participants’ expectancies that they are highly responsive to suggestion. The increase in suggestibility that occurs in such situations appears to be a product of heightened expectancies rather than the induction of an ‘hypnotic state’. That said, it would be worthwhile to test Barrios’s concentration spiral technique induction and others, which are quite ingenious, and take advantage of naturally occurring phenomena without dramatic environmental manipulations, and evaluate his methods for using self-hypnosis and posthypnotic suggestions. However, research to date has consistently failed to demonstrate the superiority of one induction method over another (Lynn, Neufeld and Mare, 1993; Lynn and Kirsch, 2006).

This state of affairs should come as good news to clinicians: inductions that require special training or equipment, or that are complex and esoteric in nature are not necessary to produce clinically significant outcomes (Lynn and Kirsch, 2006). It is also true – and Barrios seems to concur – that hypnotic suggestibility can be meaningfully increased by procedures that increase people’s motivation to respond to suggestion, demystify hypnosis, encourage imagination and correct interpretation of suggestions, and foster an active, rather than a passive response set to suggestions (see Gfeller and Gorassini, in press). Accordingly, while we concur with Barrios that ‘there may be ways of increasing the effectiveness of hypnotic inductions even more’, we do not agree that ‘if…certain hypnotic inductions can produce significantly higher levels of suggestibility’ it makes sense to talk ‘in terms of a hypnotic and nonhypnotic state’.

According to Barrios, ‘A hypnotic state could be defined as the heightened state of suggestibility…produced by the hypnotic induction’ (Barrios, 2007a: 109). Not only is it not parsimonious to invoke a ‘hypnotic state’ (with no referents other than suggestibility) to account for enhanced suggestibility, but it is also circular reasoning to define a hypnotic state in terms of suggestibility per se, as Barber has pointed out: ‘the presumed hypnotic state is directly or indirectly inferred from responses to suggestions and is then used circularly to account for responses to suggestions’ (Barber, 1969: 221–2).

Differences aside, we agree with Barrios that many hypnotic and nonhypnotic behaviours are automatized, that hypnotic suggestions can change the focus of attention (e.g. rearrange the hierarchies of automatic and deliberate behaviours) in line with therapeutic goals, and that an individual’s learning history plays an important role in determining how they respond to suggestions. We would add that in addition to Barrios’s emphasis on responses coming to be attached to suggestions by way of classical conditioning, vicarious or observational learning and instructions (and suggestions) can influence what is ‘learned’ in hypnotic and nonhypnotic contexts.
Barrios’s theory rests on the assumption that the hypnotic induction has the power to engender an inhibitory set that inhibits stimuli that compete with suggested events. In future studies, it would be worthwhile to specify how to measure an inhibitory set, apart from responsiveness to suggestions, to examine how suggestions affect responses that vary in terms of conditioning history (e.g. ‘habit strength’), and to further explore the role of cognitive inhibition and other attentional variables in relation to hypnotic suggestibility and the use of different inductions (David and Brown, 2002; Laurence, Beaulieu-Prevost and du Chene, 2008). In conclusion, we welcome Barrios’s theory, and we look forward to empirical tests of its hypotheses and corollaries.

References


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Address for correspondence:

Steven Jay Lynn, PhD, ABPP
Psychology Department
Binghamton University
Binghamton, NY 13905
Email: slynn@binghamton.edu
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