

# Implications of Barber's Three Dimensional Theory of Hypnosis

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Recently, Barber has presented a three dimensional paradigm of hypnosis. He proposed that there are three hypnotic types of clients- the fantasy-prone, amnesic-prone, and positively-set. This paper discusses the major theoretical implications of this new paradigm, and, if Barber is correct, his new theory should bridge a gap between the special process (state) and nonstate theorists. Finally, only research will determine if Barber's new theory will actually unify the previous disagreements between the state and nonstate theorists. **(Sleep and Hypnosis 2002;4(2):70-76)**

**Key words:** hypnosis, Barber's three dimensional theory, fantasy, amnesia

## INTRODUCTION

Barber (1) proposed that there are three hypnotic types of clients that he identified as the fantasy-prone, amnesic-prone, and positively-set. Before a discussion of the three types of clients is presented, it is important to provide the reader with a background of Barber's earlier theoretical position. In the 1950's, Theodore Sarbin was one of the first theorists to reject the state notion of hypnosis, and Theodore X. Barber (2) was the second major theorist to reject the state of notion hypnosis. Even though both theorists viewed hypnosis as a social psychological construct, each theorist rejected the state notion of hypnosis for somewhat different reasons.

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Sarbin (3) viewed hypnosis as a dramaturgical metaphor and he employed role theory to explain hypnosis. Hypnosis was conceptualized as role taking behavior, and not role-playing behavior, since role-playing suggests a sham. Sarbin emphasized how a client enacts the role of how a hypnotized client is supposed to behave. Moreover, Sarbin stressed the contextual variables that communicate social demands and these shape the client's expectations of how a hypnotized client is supposed to enact the role of being hypnotized.

Barber rejected the state or altered-state notion of hypnosis because he found that several variables affected hypnotic responsiveness, and he found that hypnosis could be elicited without a hypnotic induction. Moreover, he found that defining a situation as hypnosis and increasing clients' expectations could produce hypnosis. In addition, he found that the motivation and expectations of clients increased hypnotic suggestibility. Interestingly, Barber did not describe any personality traits of hypnosis (4-6).

Finally, both Sarbin and Barber believed that

hypnosis could be explained without a proposed altered state of consciousness. And contextual variables like defining a situation as hypnotic and goal-directed behavior served as a theoretical basis for hypnosis. In summary, neither Sarbin nor Barber viewed hypnosis as an unusual state of consciousness. The next will discuss how Barber developed the notion of the fantasy-prone client.

## FANTASY-PRONE

Wilson and Barber (7) interviewed 27 women who were chosen from a large group of excellent hypnotic clients; however, these women had the following commonalities within their backgrounds: an extensive history of make-believe and fantasy, vivid memories and images dating back to the age of 3, and the ability to affect the body through the mind. For example, a number of these women were able to experience pseudocyesis or false pregnancy. This led to a stoppage of their menstrual cycles, bloating of the abdomens, morning sickness, and craving for certain foods. Moreover, many of these women believed when they were children that their dolls were alive; they believed in angels, fairies, and countless forms of supernatural beings. In addition, most of these women were encouraged to develop their fantasies by their parents, and these fantasy-prone women learned to escape into fantasies. Finally, these were women who scored very highly on standardized measures of hypnotizability. The section will describe the next highly hypnotizable type of client, the amnesic-prone.

## AMNESIC-PRONE

Barrett (8,9) researched 34 highly hypnotics clients from a population of participants. Interestingly, she found that certain clients had amnesia for hypnosis. Moreover, these clients were generally amnesic throughout their daily lives. Specifically, 60 percent of these clients

had spontaneous amnesia for hypnotic situations, and all clients showed consistent and total posthypnotic amnesia when it was suggested. When Barrett compared responses of the fantasy-prone and amnesic-prone, she did not find that the fantasy-prone experienced spontaneous amnesia. The fantasy-prone and amnesic-prone clients even differed in how they responded to posthypnotic suggestions for amnesia. For example, when amnesia was suggested to the fantasy-prone clients, one-third failed the item and two-thirds had partial recall or knew that they could counter the posthypnotic suggestion.

When the fantasy-prone and amnesic-prone clients were dehypnotized, Barrett also found marked difference between the two groups. For example, the fantasy-prone clients smiled when they were dehypnotized; in contrast, the amnesic-prone clients appeared confused and attributed their experiences to the skills of the operator, while the fantasy-prone clients attributed their experiences to their imaginations.

The fantasy-prone clients and amnesic-prone clients even differed in the way they experienced hallucinations. For example, the fantasy-prone clients knew that they had elicited their hallucinations and they remembered the hypnotist's suggestions for hallucinations. Oddly, the amnesic-prone believed that their hallucinations were real and could not remember the hypnotist offering suggestions for hallucinations.

In terms of memory, there were also differences between Barrett's two groups. Most of the amnesic-prone did not have memories before the age of 5, and 40% could not remember life events before the ages of 6 and 8. And, as previously stated, the amnesic prone clients demonstrated general forgetfulness in their daily lives. Strikingly, all of Barrett's fantasy prone clients had vivid memories before the age of 3 and most had memories before the age of 2. Clinicians should be aware, with the amnesic prone clients, that many reported

having been abused. Specifically, the amnesic prone reported to have been beaten, battered, and they experienced sexual abuse and psychological abuse during childhood.

In summary, Barrett's amnesic prone clients were not fantasy prone, and the amnesic prone clients only reported narrow and mundane fantasies about their futures. In addition, the amnesic prone clients could mainly experience fantasies by becoming absorbed or dissociated in the fantasies of others through books, plays, and so on. Barrett referred to the amnesic prone clients as dissociators, because they had an external locus of control. Barrett's amnesic prone differed from her fantasy prone clients. Interestingly, her amnesic prone clients required an extensive hypnotic induction and they experienced the typical loss of muscle tone, and lethargic movements-which are indicative of clients who report experiencing hypnosis as an altered-state of consciousness. Finally, Barrett's fantasy prone clients imaginations had an internal locus of control, and they did not require and extensive hypnotic induction to elicit hypnosis.

The skilled clinician may be asking, "Which theoretical positions of hypnosis support the notion that clients become dissociated during hypnosis?" Historically, Jean Martin Charcot (1825-1893), during the late 1800's, found that clients experiencing hysteria had experienced a trauma and that the trauma had caused clients' ideations to dissociate or split off from conscious awareness. Essentially, Charcot was one of the first theorists to theorize that physiological symptoms could be caused by unconscious dissociated disturbances. Later Pierre Janet (1759-1947), theorized that hysteria was a dissociating or "splitting off" of conscious and unconscious aspects of the personality. In reality, it was Janet who originated the notion of mental dissociation as a retraction in consciousness. Janet's treatment for hysteria paralleled that of Freud's. First, Janet would find through hypnosis the dissociated experiences that caused the hysterical

symptoms. Second, he would bring unconscious experiences into conscious awareness, thus causing association or integration within the personality and resolving dissociation. Finally, he used hypnosis to increase clients' ego-strength (4,10).

According to Hilgard's neodissociation theory, hypnosis is an altered state of consciousness due to the incomplete dissociation among cognitive systems, such as the separation of conscious mental activities of the mind from unconscious mental activities. Moreover, Hilgard theorized that clients experienced dissociation as an altered state of consciousness due to an amnesic barrier that exists between the conscious and unconscious mental activities (11). In contrast, according to Woody and Farvolden's (12) dissociated control theory, hypnosis is the result of the restraint of the frontal lobe of the brain, not the result of conscious and unconscious awareness divided by a communication of amnesic barrier.

The dissociated control theorists have hypothesized that the forebrain (telencephalon), which controls subcortical structures, is involved with the elicitation of hypnosis. Woody and Bowers (13) assumed that the multiplicity of mental processes is normal and that functions of higher consciousness coordinate multiple levels of mental control, and that hypnotic suggestions weaken executive control over sub brain systems; and finally, the hypnotized client is similar to one with frontal lobe dysfunction. Clearly, there is some similarity between the neodissociation and dissociated control theories of hypnosis in that dissociation is the explanatory construct for hypnosis; however, the dissociated control theorists questioned Hilgard's notion of the division of the ego in to parts (conscious and unconscious) separated by an amnesic barrier. And the dissociated control theorists made a more explicit connection between hypnosis and the brain. In essence, the dissociated control theorists view hypnosis as dissociation within brain functions.

There is increasing brain research that demonstrates a relationship between the brain and mental activity. For example, Wegner and Wheatley (14) and Libet (15) found that brain activity preceded the onset of voluntary action. Specifically, Libet, using readiness potential, found that a scalp-recorded slow negative shift in electrical potential, and that readiness potential began up to a second or more before voluntary motor acts. In addition, Libet found that readiness potential preceded movement, which was measured electromyographically, by least 550 milliseconds. Moreover, Libet asked participants to recall the position of a clock once they were initially aware of their intention to move their fingers. Even when adjustments were made for the time it took participants to monitor a clock, participants' awareness of their intentions followed their readiness potentials by 350-400 milliseconds. This research indicated that brain activity preceded conscious intentions and actions, and this research is in line with Woody and Bowers' dissociated control theory that states hypnosis weakens frontal lobe brain functioning. The next section will discuss the positively-set clients.

### **POSITIVELY-SET CLIENTS**

Unlike the fantasy-prone and amnesic-prone clients, these clients are not the hypnotic virtuosos; however these clients have positive attitudes toward hypnosis and they are motivated to perform well and have positive expectations about hypnosis. Moreover, these clients are able to think along and imagine the suggested effects of hypnosis. Herbert Spiegel cited in Connery (16) referred to these clients as conforming, trusting and imaginative. In addition, other researchers like Spanos (17), Kirsch (18), and Wagstaff (19), Sarbin (20), Coe and Sarbin (21), Lynn and Rhue (22), Sheehan and McConkey (23) made similar inferences. In summary, Pekala, Kumar, and Marcano (24) performed a cluster analysis that supported these three hypnotic types of clients

that Barber has proposed.

The positively-set clients, often, do not report experiencing hypnosis as an altered-state of consciousness. Recently, Kirsh and Lynn (25) response set theory of hypnosis has been popular within the area of nonstate views of hypnosis. Kirsch and Lynn have extended their sociocognitive theory of hypnosis, nonstate view, by considering response expectancies and intentions as response sets that prepare for automatic responding. Response set theory states that at the moment of activation all behavior is initiated automatically. Consequently, automaticity is the result of clients' judgments, situational cues, culturally derived knowledge and beliefs, response expectancies, and the consistency of their goals. One implication of this theory for hypnosis is that clients prevent hypnotic responses from occurring as simple voluntary acts. For example, with arm immobilization, the intentional operating process would try to prevent voluntary arm immobilization, whereas the ironic monitoring process would search for cognitions that would produce arm immobilization (4). In summary, response set theories view hypnosis as automatic responding.

Research that have investigated the automaticity of hypnosis have found attentional resources are not necessary for hypnotic responding. For example, one would not expect clients with inattentive disorders to be very responsive to hypnosis; however, Barabasz and Barabasz (26), Sapp (4), and Kirsch and Sapp (27) found that clients with attention deficit hyperactivity disorder were extremely hypnotizable.

Based on Kirsch and Lynn's response set theory, cognitive load should not affect hypnotic responding, because clients use their imaginations and other cognitive mechanisms to elicit hypnosis. Kirsch, Burgess and Braffman (28) hypothesized, based on dissociated control theory, that hypnotic responding should not require intentional effort, and hypnotic

responses should not be impeded by cognitive load. In contrast, the neodissociation of hypnosis would predict that cognitive load would block responses to hypnotic suggestions. In fact, Kirsch et al. (28) and King and Council (29) found that attentional resources were necessary for memory recall and memory suppression, and their research showed that various hypnotic suggestions may require different kinds of attentional resources; however, their research offers support for the Woody and Bowers' (13), Woody and Sadler's (30), and Balthazard and Wood's (31) dissociated control theory of hypnosis.

Moreover, Kirsch et al. (28) and King and Council (29) found that cognitive load inhibited the subjective experience for challenge suggestions; however, cognitive load did not inhibit the overt behavior expression of challenge suggestions. The foregoing research indicates that there are different types of hypnotically responsive clients. Clearly, attentional resources are needed for some hypnotic situations, but it is not required for others. For example, attentional resources are needed for hypnotically suggested subjective experiences, and it is needed for memory recall and memory suppression. Moreover, Bartis and Zamansky (32) found that clients could respond to hypnotic suggestions when they visualized conflicting scenes. This indicated that Kirsch and Lynn are incorrect in that clients do not always use imagery or visualization to produce hypnosis; clearly, very hypnotizable clients can experience hypnosis and hypnotic suggestions with and without imagery. Finally, there are aspects of hypnosis that do not depend on just cognitive abilities and expectations.

Apparently, hypnosis is more complex than dissociation of sociocognitive theories that would lead one to believe, and Barber (1) provided empirical evidence that supports both theories. In summary, Barber argues that the state or trance views of hypnosis explain hypnosis for the amnesic-prone clients, and the

nonstate or sociocognitive theories describe hypnosis for many of the positively-set clients. In closing, Barber believes that the tensions that have existed between state and nonstate theorists have been due to the notion that neither group of researchers have seen the amnesic-prone clients and positively-set clients together, and neither group had experience the fantasy-prone clients.

In conclusion, Barber's new paradigm may help unify the contention between the state and nonstate theorist; however, what is absent from Barber's new paradigm is the relationship between hypnosis and the brain. There is an overlap in brain activities and theories of hypnosis, and many of the new brain imaging techniques such as computerized topographic scanning (CT scan), magnetic resonance imaging (MRI), and positron emission tomography (PET) will show more specific connections between the brain and hypnosis (33).

Specifically, Barabasz et al. (34) found that highly hypnotizable participants showed greater cortical hallucinations (suggestions to experience competing stimuli instead of the presented ones); in contrast, low hypnotizable participants did not show amplitudes in cortical event-related potential when experiencing negative hallucinations. The foregoing researchers concluded that, now, physiological markers of hypnosis can distinguish the hypnotic condition from the normal waking state of consciousness.

Even though Woody and Bowers are explicit about the relationship between hypnosis and the brain, and they offer a state view of hypnosis, they have also provided evidence for expectancy effects. For example, they stated that routinized hypnotic responding may be correlated with response expectancies, but more difficult hypnotic responding especially the hypnotic responsiveness of virtuosos, has little to do with expectancy effects. Specifically, they found that easy items on the Harvard Group Scale of Hypnotic Susceptibility, Form A

were correlated with expectancy; whereas, the more difficult items were not correlated with expectancy effects.

Clearly theories of hypnosis overlap, and at times there is an automatic aspect of hypnotic responding. Clearly, at this point within the area of hypnosis, we need more evidence-based technically eclectic theories of the brain and hypnosis like those of Crawford et al. (35), Woody and Bowers (13), Barabasz et al. (34), and Raz and Shapiro (33). With a doubt, hypnosis has features that include, but are not

limited to, dissociation, absorption, suggestibility, imaginative involvement, fantasy-proneness, response expectancies, the subjective sense of nonvolitional responding, alterations in consciousness, and automaticity. In addition, there appear to be several types of hypnosis (1). Finally, research will determine if Barber's new paradigm will encourage multidimensional research with the area of hypnosis, and because hypnosis is a complex phenomenon, it will take the synthesis of several areas to shed more light on this elusive construct.

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