# Does hypnotic responsiveness come in more than one flavor and, if so, why should clinicians care?

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***Focus article:*** Carlson, E. B., & Putnam, F. W. (1989). Integrating research on dissociation and hypnotizability: Are there two pathways to hypnotizability? *Dissociation, 2*(1), 32-38.

***Expert Commentary:*** *Does hypnotic responsiveness come in more than one flavor and, if so, why should clinicians care?* by Etzel Cardeña, Ph.D.

In their 1989 paper, Eve Bernstein Carlson and Frank Putnam provided a compact but rich overview of much of the evidence concerning two possible pathways to high hypnotizability and their implications for the dissociation field. They also related the idea of different pathways to the notion of different *types* of high hypnotizables (henceforth highs), who differ not on the *extent* to which they respond to hypnotic suggestions but on *how* they respond to suggestions. The idea of different types of highs goes back at least to the end of the 19th Century and was cogently articulated more recently by White (1937). He described two types of highs: the *active* highs*, who* eagerly comply with and are deferential towards the hypnotist, and the *passive* highs*,* who are very anxious and more than anything want to go into another state of consciousness and remain undisturbed. The parallels between this latter type and dissociation seem evident. Dissociative reactions involve a number of alterations of consciousness such as changes in body image, time perception, and a sense of detachment from the self and the environment; its function in the context of trauma may be to reduce "disturbance" or set an experiential distance between the self and internal or external events (Cardeña, 1997).

Unfortunately the research by White was for the most part ignored until the 1990s. Ernest Hilgard did not investigate thoroughly the distinction among highs (although his Profile Scales of Hypnotic Susceptibility provide an excellent tool to do this but have been ignored by most researchers), but was interested in it (Hilgard, 1990, personal communication); Mary Miller and Ken Bowers (1993) described how some highs used "imaginative absorption" to suppress pain whereas others just shut it off automatically and found imagery strategies counterproductive. Deirdre Barrett (1996) described two distinct groups of highs, one composed of individuals with a strong use of imagination and attentional focus and who could come out of hypnosis rapidly; the other, of individuals who exhibited a slower response to a hypnotic induction, sense of lack of control, amnesia, and low muscle tone, among other features. T. X. Barber (1999) then developed a more comprehensive theory of high hypnotizability that included "fantasy prone" and "amnesia prone" individuals, plus a third group of respondents who do not evidence much fantasy or dissociation outside of hypnosis but respond strongly to a hypnotic context because of their positive cognitive set and motivation. I looked at the anthropological literature and found a cross-cultural pattern similar to the first two proposed types (Cardeña, 1996) when comparing classical shamanic flight with spirit possession experiences.

A series of studies conducted by Ron Pekala and collaborators (for a review see Pekala & Kumar, 2007) have supported the proposal that there are at least two types of highs, roughly along the lines described earlier for fantasy or amnesia-prone individuals. Research in our lab employing a more definitive statistical technique than used previously, latent profile analysis, evidenced two different types of highs. The first one, very similar to previous descriptions of the *fantasy prone,* exhibited greater attentional skills and imagery vividness. In contrast, the second group, was akin to the previously described *dissociative prone,* with higher scores on negative emotions and marginally lower volitional control than the first group, but contrary to previous descriptions, rates of episodic amnesia did not differ between these two groups (Terhune & Cardeña, 2010). However, the high dissociation group did exhibit impaired working memory, higher amounts of previous trauma, pathological fantasy, and dissociative pathology (the DES-taxon), and were more responsive to suggestions for both positive and negative hallucinations (Cardeña, Marcusson-Clavertz, & Wasmuth, 2009; Terhune, Cardeña, & Marcusson-Clavertz, 2011). These studies were conducted primarily with students; a clinical population would probably show greater distress and dissociation. It bears mentioning that in our studies we have found that although a substantial amount of highs also score as high dissociators, whereas low hypnotizables very rarely also score as high dissociative (less than 10%). This observation corroborates a previous study with girls who had been abused and a non-abuse comparison group; only two out of 33 (6%) of low hypnotizables also scored as high dissociators, whereas high hypnotizables could be either low or high dissociators (Putnam, Helmers, Horowitz, & Trickett, 1995). This same study showed that what the authors called "double dissociators" (i.e., individuals high in both hypnotizability and dissociation) in the abuse group were more likely to report greater trauma severity as indexed by number of perpetrators and earlier onset of abuse. I should also point out that two of the three individuals categorized as high dissociators in the

comparison, non-abuse group, were later found to have also had an early history of abuse (Putnam, personal communication, 2009), further reinforcing the close relationship between trauma and dissociativity (for a review see Cardeña & Carlson, 2011). Also relevant is a study in which, even though a higher percentage (33%) of fantasy-prone, highs reported early trauma/severe stress as compared with a control group (0%), still the majority of highs (i.e., 67%) did not mention such a history (Wilson & Barber, 1983, see also Putnam et al., 1995). This finding supports the earlier description of two paths to high hypnotizability (J. R. Hilgard, 1979), one involving a history of severe punishment (and probably other traumatic events and, as we have found more recently, disorganized attachment, Liotti, 2006), and the other a far more benign early engagement in imaginative and similar activities. There is also research showing substantial heritability for hypnotizability and for dissociation (for a review see Cardeña & Carlson, 2011).

However, a caveat is in order: The studies just reviewed do not show that the two types proposed are *perfect* types but they do suggest that highs are a heterogeneous group formed of at least two distinct and partly overlapping types. Similarly, the research reviewed is consistent with Carlson and Putnam's remarks about individuals who tend to dissociate easily either when stressed or in the context of hypnosis, as compared with those who engage in imaginative involvement during hypnosis, and do so in a more controlled and intentional way. These findings hark back as well to the distinction that Pierre Janet made between two kinds of what he called "somnambulism": spontaneous (i.e., chronic dissociation triggered by earlier "vehement emotions" and overwhelming stimuli, especially in those with a disposition to dissociate) and induced (i.e., dissociation occurring only in response to hypnosis) (1976/1919).

So the answer to the first rhetorical question in this commentary's title is that, indeed, there is good evidence that hypnosis comes in more than one flavor. Now, to the second question…

An important clinical implication of the research reviewed is that high hypnotizability should not be assumed to be an indicator of chronic/pathological dissociation. The fact that dissociative reactions can occur in hypnosis and other contexts such as rituals (Cardeña, 1997) *does not* imply that the individual will be highly dissociative or dysfunctional in other contexts (e.g., Moreira-Almeida, Lotufo Neto, & Cardeña, 2008). This may seem obvious to many readers, but it bears mentioning because I have heard presenters in a number of demonstrations, workshops, and lectures equating high hypnotizability with chronic dissociation. It also helps explain why, although some studies have found a significant correlation between hypnotizability and dissociation (e.g., Butler & Bryant, 1997), the relationship between both processes is modest and not pellucid, as the authors of the target article show in another publication (Putnam & Carlson, 1998). Another obvious corollary is that although there is clear evidence of a relationship between trauma and dissociative phenomena, a traumatic history should not be assumed just because an individual is highly hypnotizable, or even highly dissociative. There can be many triggers of dissociativity including use of some drugs, cultural practices, observational learning, and various others.

Another important point for the clinician is that although the research on hypnotizability *does not* support the notion that everyone is very responsive to hypnotic procedures depending on the ability of the hypnotist to find "the right way" to hypnotize a particular person, it *does* support a clinician's attempts to evaluate the type of hypnotic abilities that a particular client may possess. Woody, Barnier, and McConkey (2005) have offered evidence that hypnotizability can be thought of in componential terms in which there is a major latent factor (hypnotizability in general) in addition to specific abilities (e.g., perceptual, cognitive, or memory alterations) that will be manifested by some but not all highs. Whereas a few highs may be able to respond to suggestions either through imagination or through "shutting off" an experience directly, others will only be able to use one or the other strategy. The clinician should try to determine the specific hypnotic abilities of the individual and *utilize* them therapeutically (Yapko, 2003).

There is one final point of clinical import in the relationship between hypnotizability and dissociation. Research has shown quite conclusively that a number of hypnotic-like phenomena such as attention-focusing and time distortions will occur transiently as responses to traumatic events, but for most individuals these reactions will cease days or weeks after the event (e.g., Cardeña & Spiegel, 1993). In contrast, individuals with posttraumatic conditions may dissociate even in response to relatively minor everyday stresses (Koopman et al., 2001). One of the advantages of hypnosis is that it can be modeled as a controllable and structured context in which "spontaneous" dissociators can be taught

how to use alternative coping strategies and to control their dissociation when it occurs or use it in advantageous rather than rigid and automatic ways (Spiegel & Cardeña, 1990). Thus, it is not surprising that many clinicians give a central role to hypnosis in the treatment of dissociative disorders (e.g., Putnam & Loewenstein, 1993), and there is evidence from various sources for the effectiveness of hypnotic techniques to alleviate posttraumatic symptomatology (Cardeña et al., 2009). Because level of hypnotizability is positively correlated with the efficacy of hypnotic interventions (Flammer & Bongartz, 2003) and high dissociators are likely to be at least moderately hypnotizable, it makes strong clinical sense to gain expertise on hypnotic phenomena and techniques in general, as well as elucidating what specific hypnotic abilities a particular person may manifest inside and outside the consulting office.

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