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ARTICLES

Promoting Safety in Hypnosis: A Clinical Instrument for the Assessment of Alertness

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Hypnosis has long demonstrated its power to facilitate various approaches to psychotherapy. Like other potent modalities, hypnosis may produce unwanted effects. Although its negative sequelae are usually mild and transient, more serious complications may occur. Recently, attention has been drawn to the powerful role of failures of dehypnosis or alerting/realerting in producing unwanted effects. Traditionally, alerting has been viewed as a relatively uncomplicated process that requires little more than the simple suggestion that the subject will return or awaken from trance, and exiting from trance has generally been considered the cessation of the phenomena suggested during induction and thereafter. Newer findings challenge these assumptions and suggest that restoring the subject to a prehypnotic baseline level of alertness is of equal or greater importance. Here, I describe the Howard Alertness Scale (HAS), with which subjects can be made aware of their baseline levels of alertness to help them understand the unique ways that their trance states differ from their normal alert states, and assess and measure their subjective perception of alertness before and after hypnosis. Furthermore, regular use of the HAS holds potential to enhance both the therapeutic alliance and the patient's sense of safety and mastery. The development and use of the HAS is discussed along with three vignettes illustrating its clinical application.

Keywords: alertness, dehypnosis, Howard Alertness Scale, realerting

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The Connection Between Adverse Reactions in Hypnosis and Incomplete Alerting

Historically, studies of adverse effects have given less consideration to problems with realerting than to other relevant concerns about safety. Scholars and clinicians alike have noted the occurrence of unwanted consequences and attempted to address relevant concerns about safety. Although negative reactions to hypnosis in particular settings, especially stage hypnosis, are discussed frequently (Gruzelier, 2000; MacHovec, 1986), the mainstream hypnosis community tended to see such instances as something that usually happened elsewhere, among practitioners of lay hypnosis. The adverse effects most extensively discussed in the literature in clinical practice include the emergence of strong affect (primarily anxiety); the encountering of unanticipated repressed/dissociated material (and/or spontaneous or uncontrollable abreactions); the discovery of problematic ego states; the onset of acute psychophysiological or somatoform symptoms (e.g., headaches, non-epileptic seizures); the onset of acute psychiatric decompensation (usually psychotic in nature); and difficulties with dehypnosis/realerting.

These occurrences have been attributed to a number of factors (Gruzelier, 2000; Kluft, 2012a, 2012b, 2012c, 2012d; Lynn, Myer, & Mackillop, 2000; MacHovec, 1986; Page & Handley, 1990; 1993). These include subject factors, such as hypnotizability, underlying psychopathology, and idiosyncratic understandings of the experiences of hypnosis. Operator factors noted include the practitioner's training, experience, and orientation; the type of induction that was used; the suggestions that were made; and the techniques of dehypnosis employed. Occasionally operator psychopathology or other influences become relevant.

Both MacHovec (1986) and Gruzelier (2000) provide thoughtful summaries and descriptions of the range of unwanted effects that have been attributed to or associated with hypnosis. Gruzelier (2000) summarizes both transient unwanted phenomena and undesirable sequelae that persist beyond the hypnotic experience. A transient physiological symptom would be considered a minor adverse effect, such as a headache or altered state that persists after formal hypnosis ended. More severe reactions would include destabilizing dissociative symptoms, possibly placing the patient at risk of harm. Both authors noted difficulties with alerting among the unwanted aspects of hypnosis, but this was not their primary concern. In general, subjects' problems with alerting have been treated as if they were self-limited and associated with the non-compliance of the subject, or with the subject's resistance or reluctance to leave a pleasurable trance experience, or, if prolonged, due to the subject's pre-existing psychopathology.

While many authors have noted problems of realerting briefly or in passing, very few have paid attention to the importance and role of these problems in contributing to the causation of unwanted reactions until quite recently. J. Hilgard's (1974) thoughtful reflection that most problems said to be unfortunate aftereffects of hypnosis might, in fact, be due to the unrecognized persistence of hypnosis that did not engage the lasting attention of the field.

Review of the Literature

The incidence of adverse effects reported from research settings varies widely. This variation may reflect differences in the hypnotic scales employed, the tasks and suggestions being studied, other aspects of specific projects that might have affected subjects' hypnotic experiences, and the demand characteristics of particular experimental situations. Across research studies, it is generally agreed that mild and transient negative effects are common, while more serious instances are less frequent.

Hilgard, Hilgard, and Newman (1961) found that 8.5% of students who experienced hypnosis induced with the Stanford Hypnotic Susceptibility Scale Form A (Weitzenhoffer & Hilgard, 1959) experienced some adverse effects, such as headaches. In a later study in which subjects experienced two inductions using both the Harvard Group Scale of Hypnotic Susceptibility (Shor & Orne, 1962) and the Stanford Hypnotic Susceptibility Scale Form C (Weitzenhoffer & Hilgard, 1962), a 31% incidence of unwanted effects was reported. Crawford, Hilgard, and Macdonald (1982) noted a 5% incidence using the Harvard Group Scale and a 29% in subjects using what became the Stanford Form C.

In 1965, Orne called attention to the risk of assuming that all commonly used images were safe for all subjects. Reflecting on numerous research findings, Gruzelier (2000) observed that the Stanford Form C contains more items categorized as cognitive, (including suggestions for hypnotic dreams and age regression), which have demonstrated greater potential to elicit adverse reactions than Harvard Group Scale items. He notes that the developers of the Harvard and Stanford scales, aware of the potential of imagery to elicit negative associations and reactions, modified the original items in their instruments to reduce unwanted reactions. For example, the original age regression suggestion on the Stanford scales was revised to direct subjects to go back to a nice day, rather than risk the consequences of a more vague and less cautious directive.

Researchers utilizing these instruments have explored several approaches designed to reduce side effects. Crawford et al. (1982) studied the impact of providing a demystifying lecture and a question and answer session before the hypnotic induction, and a stretching exercise after the experience of hypnosis. Fewer of those with the stretching exercise reported feeling drowsy or taking naps. Page and Handley (1993) attempted to decrease negative sequelae with a protocol using a demystifying lecture. In addition, the experimental group (but not the control group) was informed that no treatment would be taking place, an effort to create the expectation that no lasting effects would be experienced. They found that in both the experimental and control group, 44.1% of the subjects experienced some negative aftereffects (i.e., headache, dizziness, drowsiness, and/or cognitive disorientation).

Others have drawn upon their experience to suggest approaches to reduce negative reactions to hypnosis. MacHovec (1986) stressed the importance of proper training for clinicians, and advocated that accreditation procedures be implemented. He recommended against the practice of stage hypnosis, which he estimated created double the incidence of unwanted effects encountered in clinical and research hypnosis unless special conditions

prevailed, such as the careful screening of subjects and diligent dehypnosis. Others have expressed similar misgivings about stage hypnosis (Echterling & Emmerling, 1987; Gruzelier, 2000; Heap, 2000; Mott, 1992; Schultz, 1954). Gruzelier (2000) summarized studies of adverse reactions in stage hypnosis, including an instance of sudden death. Reports of unfortunate incidents subsequent to stage hypnosis continue to be reported in the media. They often involve difficulties with realerting. In one egregious recent example, a group of girls at a Canadian boarding school remained stuck in trance at the end of a performance. The hypnotist was forced to contact his own hypnosis teacher, who succeeded in alerting the girls from trance (Ritz, 2012).

Additional reports of incidents involving hypnosis used by laypersons can be seen in the media, including an extremely disturbing report of a high school principal in Florida who was using hypnosis with students. Three of his students died shortly after undergoing hypnosis, including two students who committed suicide and another who, after apparently using self-hypnosis for pain control, was observed to be not fully alert and suffered a fatal car crash (Campbell, 2015).

Gruzelier (2000) thoughtfully addressed the connection between inadequate dehypnosis and adverse reactions:

The adequacy of dehypnosis and the adequacy of removal of suggestions have been related to untoward effects. Although this is undoubtedly the case, conventional dehypnosis procedures have not precluded adverse reactions. Responses to instructions during hypnosis and the reliving of experiences triggered by associations in hypnosis may be delayed over days after hypnosis, whether or not they had been responded to in hypnosis or removed in the end. (p. 178)

He suggested that the efforts of Crawford et al. (1982) and Page and Handley (1993), both aimed at reducing negative effects, be further developed: "Crawford's attempt at raising arousal before dehypnosis could incorporate extended instruction of mental alertness before dehypnosis to complement the physical stretching exercises and conversation that followed hypnosis" (Gruzelier, 2000, p. 189). He hoped that restoring "levels of arousal" back to normal might avoid common negative effects, such as headaches.

Kluft (2006, 2012d) was the first to draw attention to the frequency of such problems in workshop settings taught by experienced and skilled practitioners. He described exploring the experiences of 30 individuals who had had adverse reactions during and persisting after hypnosis training workshops. Every one of these workshop attendees reported experiencing inadequate or incomplete dehypnosis. Kluft (2012a, 2012b) recommended that special attention be paid to the process of realerting in workshop settings, and urged workshop leaders to make serious efforts to ensure that all students are properly alerted from their trance experiences.

Kluft's studies (2012a, 2012b, 2012c, 2012d) described and illustrated the problems his subjects had experienced in the workshop setting and thereafter. He identified potential misadventures in hypnosis workshop settings, characterized the different adverse reactions that can occur, and made two dozen recommendations designed to

reduce adverse reactions during hypnosis training. He also listed and described many techniques useful in helping trainees exit from unwanted persistent trance and unwanted trance-related phenomena. His recommendations included the use of directive alerting techniques, the avoidance of using stock imagery in hypnotic suggestions, the use of the Howard Alertness Scale (HAS; Howard, 2008; scale reprinted in Kluft, 2013) with or without adaptations, and making more extensive use of the exceedingly safe Hypnotic Induction Profile (Spiegel & Spiegel, 2004) protocol. Finding that subjects who encounter difficulties are often reluctant to admit their discomfort, due to feelings of embarrassment or shame, and that often neither peers nor workshop faculty detect that a subject is having a negative reaction, Kluft (2012a, 2012b) stressed the importance of creating an atmosphere in which subjects are encouraged to come forward and disclose or discuss any difficulties they were experiencing.

The Development of an Alertness Scale

I became aware of Kluft's concerns related to inadequate alerting in 2008, shortly before I began to supervise small group practices in hypnosis workshops. During my first evening as an instructor I encountered multiple instances in which subjects appeared to have been incompletely realerted. Their eyes might be open, but they clearly were not fully out of trance. In one example, the subject had a fixed stare and little spontaneous movement, yet he and the operator believed that he was fully alert because his eyes were open. In another example, the subject appeared preoccupied and anxious, yet denied that anything was wrong. In such instances, neither they nor their peers, nor their instructors, appreciated that the dissociation inherent in hypnosis persisted after the termination of trance.

Incomplete dehypnosis was being mistaken for full alertness. Remarkably, the phenomena I observed were not considered to be problematic. That such phenomena were both commonplace and not being deemed worthy of exploration or correction seemed curious indeed, and motivated me to explore the problem of incomplete dehypnosis and search for a method to improve alerting.

Although alertness is a familiar term in hypnosis, often contrasted to the trance state, the field has devoted its attention to the study of hypnosis, and left alertness itself relatively unexplored. This appears to be an unintended and unwanted effect of the sleep metaphor introduced by Braid (James Braid Society, n.d.) which implicitly analogizes sleep to eye-closure, and awakening to the eyes being open. In addition to metaphors of sleep and awakening from sleep, students in hypnosis workshops are often presented with hypnotic depth scales in which one end of the scale is defined as "awake and alert" and the other as "very deeply hypnotized" (Tart, 1970, 1979). This can create the impression that the trance state and the alert state are inversely related, and students may assume that if they appear "awake and alert" they are not in trance. I realized that in order to distinguish the alert state from the trance state it would be essential to clarify

that the alert state is not the opposite of the trance state, and to recognize the trance state as an altered alert state that may overlap with the normal alert state. The imprecision with which the term "alertness" has been applied is well illustrated in the paradoxical term, alert hypnosis (Wark, 2006), in which alertness signifies that hypnotic phenomena may be elicited while the subject's eyes are open (\pm the subject engages in significant motor activity).

Looking beyond older sleep metaphors, alertness is a complex neuropsychiatric construct usually understood as the ability to detect changes in the environment and react to changes appropriately (Shapiro et al., 2006). A thorough discussion of the construct of alertness would include the neurocognitive construct of alertness as an attentional network with neuroanotomical underpinnings (Faymonville, Boly, & Laureys, 2006; Fingelkurts, Fingelkurts, Kallio, & Revonsuo, 2007; Posner, 1978, 1995, 2008; Posner & Dehaene, 1994; Posner & Rothbart, 2007; Raz, 2004, 2005; Raz & Buhle, 2006), but is beyond the scope of this article. Although the measurement of trance and depth of trance is discussed extensively in hypnosis publications, my literature search did not uncover studies specifically addressing measurement of the construct of alertness.

In most scientific explorations of alertness, it is studied in connection with monitoring the impact upon or modification of alertness by some substance or environmental manipulation (e.g., alcohol or sleep deprivation, respectively). Although it may be obvious why restoring alertness is essential in other areas, this has not always been clear in hypnosis. However, some of the key aspects of the trance state, such as narrowed focus of attention, absorption, dissociation, perceptual changes, trance logic, increased suggestibility, and compromise of the Generalized Reality Orientation (Shor, 1959) involve alterations of the ability to detect changes in the environment and respond appropriately. Shapiro et al. (2006) observed that understanding and measuring alertness was a precondition for understanding factors that might modify this phenomenon. In their study of sleepiness, Shapiro et al. (2006) discussed the complexity of the relationship between alertness and sleepiness and addressed the common misperception that sleepiness is the opposite of alertness in a manner consistent with the observations of Gruzelier (2000) and Kluft (2012a, 2012b, 2012c) regarding hypnosis.

My efforts confronted the classic dilemmas that surround defining hypnosis, distinguishing the presence of trance from the absence of trance, and differentiating the trance state from the alert state. These already formidable challenges were further complicated by my increasing realization that these phenomena are not discrete either/or entities. Gruzelier (2000) cautioned against assuming that hypnosis is an all or none phenomenon. In a similar vein, Kluft (2012a, 2012b, 2012c, 2012d) spoke of the importance of looking beyond all or none conceptualizations in these matters and recognizing the existence of mixed or transitional states. Both authors underline the need to be sensitive to subtle manifestations of residual trance. Further difficulties are raised by Kluft's (2012d) discovery, already implicit in the observations of Hilgard (1974) noted above,

that the persistence of trance may go undetected by hypnotist, subject, and observers alike.

Mindful of these considerations, I began to approach the assessment of dehypnosis from the perspective of studying the subject or patient's baseline (pre-hypnotic) alertness and the degree to which this baseline alertness was re-established via the dehypnosis/realerting process. This alternative paradigm bypasses the difficulties raised by the absence of a consensually accepted and operationally measurable definition of hypnosis (Barnier & Nash, 2008). It focuses instead upon the specific phenomena dehypnosis is designed to restore in a specific subject or patient. In other words, rather than focus directly upon the definitions of both trance and the removal of trance, long subjects of disagreement between researchers and clinicians, I turned my attention to characterizing the alert state and the restoration of baseline alertness.

I concluded that given the nature of the phenomenon of hypnosis, which is both difficult to define and highly subjective, and the current limitations of our knowledge, definitions, and instruments, the modification of alertness by hypnosis would be best captured and quantified by a subjective rating scale. Further, as stated by Gruzelier (2000), noted in passing by Kluft (2012a, 2012b), and implicit in remarks of Orne (1965), it would be most pragmatic and expeditious to avoid employing characterizations and expectations drawn from a literature that had not studied alertness in depth, and, instead, to utilize subjects as their own controls. Such scales have demonstrated their utility in many research and clinical settings in which the phenomena studied are also inextricably subjective in nature, and an assessment with a simple, easily utilized and quickly administered instrument is desirable (Annet, 2002). Examples include the Epworth sleepiness scale (Johns, 1991), the subjective units of distress scale (Wolpe, 1969), and the visual analog scale for pain (Breivik et al., 2008).

An Introduction to the Howard Alertness Scale

The HAS (2008; also reprinted in Kluft, 2013) is a 1 to 10 scale for measuring the subjective level of alertness experienced by an individual prior to and subsequent to the use of hypnosis (see Table 1). Table 2 provides instructions for using the scale. At this time it is a clinical tool still in the process of development, with neither reliability nor validity measures having been established. Subjects are taught to observe the qualities of their baseline alert state before the introduction of trance, such as their sensations and perceptions, and to make a baseline global subjective assessment of their pre-hypnotic alertness.

This baseline assessment is then compared to the subjective reassessment of alertness made after hypnosis has been induced, employed, and ostensibly terminated. This permits

¹ Edward J. Frischholz, Jr., Ph.D., strongly encouraged and supported my development of the HAS. He considered it important for the improvement of safety in hypnosis and took the initiative to mount a research project to explore it in greater depth. Unfortunately, this effort came to an abrupt halt with his untimely death.

TABLE 1 Howard Alertness Scale

Pre-Hypnosis

We are going to measure how alert you are at this time. This will be measured on a scale from 1 to 10. On this scale 1 represents a very low level of alertness, and 10 represents a very high level of alertness. To help you assess your level of alertness you will be asked to pay attention to different ways that you perceive your environment, and also to the way that you are thinking.

Take a moment now to notice how awake and alert you feel at this time. Gather information from all your senses:

- Look around you and notice the various things that you see. Notice how the images appear and the clarity, the color.
- Notice the sounds around you and the quality of whatever you hear.
- Notice the feelings in your body including the feeling of the chair against your body and the feeling of your feet against the floor.
- Notice how connected you feel to your body and how aware you are of your surroundings. Notice how present you
 feel in this time and place.
- Notice how clearly and logically you are thinking, and how your mind moves from thought to thought as you focus
 on different things around you.

On a scale from 1 to 10, where 1 is very low, 2 is low, 5–6 is medium, 9 is high, and 10 is very high, find the number that best describes how alert you feel right now.

(Circle subject's level of alertness)

1	2	3	4	5	6	7	8	9	10
very low	low		medium						very high

Post-Hypnosis

On a scale from 1 to 10, where 1 is very low, 2 is low, 5-6 is medium, 9 is high, and 10 is very high, what number best describes how alert you feel right now.

1	2	3	4	5	6	7	8	9	10
very low	low	medium						high	very high

The Howard Alertness Scale (HAS) is a 1 to 10 scale for measuring the subjective level of alertness experienced by an individual prior to and subsequent to the use of hypnosis.

its application to monitoring whether any changes in alertness persist post-hypnotically. Those changes that reflect the impact of therapeutic efforts to modify problematic phenomena, of course, would not be considered problematic (e.g., the reduction of the pre-hypnotic subjective experience of discomfort associated with efforts to achieve pain relief).

This simple methodology equips both subjects and practitioners with a practical approach to measure the impact of the recent trance experience upon the subjective experience of alertness. It benchmarks the pre-hypnotic experience of subjective alertness and allows both operator and subject, clinician and patient, to acknowledge,

TABLE 2 Howard Alertness Scale Instructions

Pre-Hypnosis

- 1. Interview subject and prepare subject for hypnosis in your usual fashion.
- 2. Before first induction, explain to subject that alertness is something that changes with hypnosis. You may explain that hypnosis is a special state in which attention is narrowed and a person may experience their environment and themself in a different way. You may also add that everybody experiences changes in how alert they feel at different times.
- 3. Read the first paragraph of the Howard Alertness Scale sheet starting with "we are going to measure how alert you are at this time" and pause briefly before continuing with "take a moment now to notice how awake and alert you feel at this time" and continue reading in a normal tone as you go through the list of things that you are instructing the subject to notice or pay attention to.
- 4. After reading the last line, ask the subject to rate his or her level of alertness on a scale of 1 to 10 and circle the subject's level of alertness on the paper.
- 5. Begin induction.

Post-Hypnosis

- 1. Engage subject in an open inquiry about his or her hypnotic experience and observe subject closely for objective evidence of alertness. Look for any change in his or her general appearance of alertness and observe breathing, body movement, eye movement, posture, and muscle tone. Notice speech and affect. Subjects with slower breathing, little spontaneous movement or speech and a fixed stare, or a somewhat slower response to inquiries or instructions may still be in trance. Subjects who appear very emotional or who show signs of negative affect may also be experiencing residual effects of trance.
- Evaluate subjective level of alertness by asking subject how alert he or she feels on a scale of 1 to 10 and record this on the Howard Alertness Scale sheet.
- 3. You may remind subject of the things he or she should notice when reevaluating subjective alertness. For example, you may tell subject to look around and notice how things appear, how connected they feel to their body, and how clearly they are thinking as they notice different things around them.
- 4. If subject reports an alertness level less than the original number, or appears to be less alert, take measures to insure complete alertness. If the degree of decreased alertness is minimal this may be as simple as suggesting that they will gradually return to their original level of alertness and recheck after further discussion and grounding measures. If subject does not achieve an alertness level close to original alertness by subjective or objective measure then further alerting efforts are required.
- 5. With future inductions it may not be necessary to read the entire Howard Alertness Scale but simply remind subject that once again we will "take a moment to measure how alert you are at this time" and ask subject to rate his or her alertness on a scale of one to ten. It may be helpful to remind subjects to pay attention to their environment and the way that they are thinking as they do this.

Note. Instructions designed to help operators administer the scale and to sensitize the operator to making an objective assessment of the subjects' alertness subsequent to realerting.

discuss, and proceed to address any residual unwanted impacts of the hypnotic experience.

The HAS begins by informing subjects that they will be measuring their alertness on a scale of one to ten with one representing a very low level of alertness, and ten representing a very high level of alertness. They are then instructed to pay attention to some of the ways that they experience themselves and their environment. This is designed to calibrate some of the potential features of the hypnotic experience (e.g.,

narrowing of attention, their experience of themselves and their bodies, dissociation, and sensory alterations). Subjects are asked to rate their alertness before and then after their hypnotic experiences.

I have provided instructions for using the scale designed to help operators administer the scale and to sensitize the operator to making an objective assessment of the subjects' alertness subsequent to realerting (see Table 2). The operator is instructed to observe subjects carefully, noting their general appearance of alertness, breathing, body movement, posture, muscle tone, speech, and affect prior to, during, and after hypnosis. In this way, subjects who show objective evidence of inadequate alerting, such as slower breathing, little spontaneous movement or speech, a fixed stare or a somewhat slower response to inquiries, or who appear very emotional, may be identified as having potential difficulties with realerting. These indicators, while helpful, are not definitive, and further, research demonstrates that often they are either not evident, or not appreciated by skilled and experienced observers (Kluft, 2012d).

Clinical Illustrations

The vignettes below illustrate the potential usefulness of an alerting scale in clinical hypnosis. The identities of those discussed below have been disguised.

Vignette #1. Fear of Losing Control and Becoming Lost in Trance

Elise, an academically outstanding graduate student, reported a history of childhood sexual abuse. She stated that "mind control" techniques had been used to facilitate her abuse. She suffered both Dissociative Identity Disorder and Post-traumatic Stress Disorder. She was terrified that hypnotherapy would prove to be yet another instance of traumatic domination. While primarily concerned about being controlled, her fear of losing control was almost of equal intensity. She worried that she would become lost in trance and be unable to return to her usual self. Consequently, although I often reflected that the use of hypnosis would have been helpful in her treatment, after her profoundly negative reaction to my first inquiry about the possible use of hypnosis, I never again suggested nor formally employed hypnosis.

After several years of psychotherapy and pharmacotherapy, Elise had experienced significant improvement. Nonetheless, she realized more work remained to be done. Her attitude toward hypnosis changed abruptly when she was diagnosed with a grave smoking-related illness and learned that hypnosis could be helpful in achieving smoking cessation. Toward the end of one session she surprised me by announcing that she wanted to use hypnosis to break her three-pack-a-day smoking habit. We reviewed her ongoing apprehension that she would lose control, that hidden elements might emerge from within herself, and that somehow, through hypnosis, I would become able to control her mind and behavior.

I assured Elise that she could experience hypnosis without losing control. I explained that she could learn to be aware of any changes she experienced with hypnosis and return to full alertness at any time. The HAS was introduced in order both to enhance her understanding of hypnosis, and to teach her to observe, characterize, and measure her personal experience of alertness. This provided the reassurance she needed that she would be able to evaluate and understand what was happening both during her hypnotic experience and thereafter.

We began the initial hypnotic experience by utilizing the HAS to allow Elise to obtain and understand a baseline measure of her alertness. I then asked her to choose an image of a place in which she would feel safe and calm. She explained that the couch in my office was the only place she could imagine feeling "protected, safe, and cared for." I utilized this safe place imagery in a naturalistic induction by encouraging her to let her eyes closed as she imagined this more fully, utilizing all of her senses. I observed that she appeared to be quite readily and deeply absorbed in this image. We limited this experience to a few minutes, followed by directive realerting. Elise responded positively to this experience, noting happily, "I was completely aware of everything that had happened." After dehypnosis, she reported an alertness level higher than her initial level. She then announced that she would finish all the cigarettes that she had, and would return in 2 days for a formal hypnotic session for smoking cessation.

When Elise returned, we began hypnosis without using the HAS. Elise immediately became concerned and asked me why I had not used the scale. She explained to me that using the scale made her feel "grounded" and "in control." I admitted that I had simply forgotten. I apologized, and we used the HAS to quantify a baseline alertness level. I assured her that she would be able to open her eyes and be aware of everything that was happening and would be able to choose to either alert herself or to continue at any time.

At her next session, Elise arrived prepared with safe place imagery that she had developed after our initial session. She had highly creative beautiful images in a seaside setting. We proceeded with a formal induction using a hands together induction (Hilgard & Hilgard, 1983) and deepened her hypnotic experience using the detailed images she had prepared. Motivational factors were built into the suggestions she was given. For example, since Elise had a chronic cough, we discussed how the cilia (the hair-like structures that line the respiratory tract and function to sweep the lungs clean of mucous and dirt) were affected by her smoking. She particularly appreciated the image I suggested of "happy cilia moving freely no longer burdened by smoke." During the hypnotic experience, I noted that she would periodically open her eyes (even during the "hands together" induction) and then close her eyes again. Whenever she did open her eyes, I remarked that it was good that she was taking care of herself. After that session, she again reported an alertness level higher than her initial baseline alertness.

Elise never returned to smoking. Nor did she ask for additional hypnotic sessions for smoking cessation. She did use self-hypnosis at home modeled on our work together,

and has continued to be free of cigarettes for over 6 years. She has become capable of utilizing hypnosis in other aspects of our work, much to her benefit.

Vignette #2. Difficulty Exiting the Trance State in a Workshop Setting

In recent years, I have observed a number of subjects experiencing difficulty making their effective exits from trances induced during small group practice sessions I was supervising, the phenomenon explored in detail by Kluft (2012b, 2012c, 2012d, 2013).

Shortly after I began teaching in hypnosis workshops, I noticed that one subject did not appear to have become fully alerted following dehypnosis. Neither the subject nor the operator, both hypnosis neophytes, seemed aware of the situation.

The subject appeared groggy. He demonstrated minimal spontaneous movement or speech. When this situation persisted, I decided that it was necessary to intervene.

I began by asking the subject if he felt alert. He responded, "Yes. My eyes are open." I tried to explain to the subject that he could have open eyes but still be in trance, but the subject had yet to learn about alert trance or waking hypnosis. My efforts to educate him about his situation were unsuccessful. I had just developed the HAS, but had never used it in a workshop setting.

I could not employ the HAS in the middle of an ongoing situation, but it occurred to me that if I succeeded in explaining to him the concept of alterations in alertness inherent in the HAS, I might be able to help him understand that the quality of his alertness had been changed by his as yet unresolved hypnotic experience.

In order to demonstrate that a person could be alert and still in trance, I drew a primitive graph that represented alertness on one axis and hypnotic depth on another, with various intermediate points to represent a spectrum of possible variations/combinations of hypnotic depth and alertness. He glanced at the graph, and then seemed to accept the basic premise that any person, including himself, could be alert in many ways but still remain in trance; that is, that despite his eyes being open, he still might be experiencing significant alterations in alertness. He finally conceded that it was possible that he might not yet be fully alert.

Now, he cooperated completely with my efforts to realert him. Working together, we were able to guide him back into trance, and then alert him with clear and firm directive instructions that he return to complete alertness. After this, he appeared completely alert, neither demonstrating nor subjectively experiencing signs or symptoms suggestive of residual trance.

Vignette #3. The Use of the HAS in Self-Hypnosis; Further Discussion of Vignette #1

Several of my patients have found the HAS useful in their practice of self-hypnosis. The following examples demonstrate the potential importance of utilizing the HAS for patients with major issues concerning control.

Mary, a driven and successful mature attorney, had been in ongoing psychiatric treatment for Bipolar I Disorder and Post-traumatic Stress Disorder when she was referred to me by a sleep disorder specialist who hoped that hypnosis could facilitate treatment of her severe sleep problems. At our initial meeting she stated that her moods were under good control, but that her sleep problems persisted despite the trial of multiple medication regimens designed to relieve her difficulties. Specifically, Mary had great difficulty both in initiating and maintaining sleep. No sooner had I begun to discuss the possible use of hypnosis to help with her sleep problems than she interrupted me to express her fear of losing control.

After we discussed both the nature of hypnosis and common myths and misconceptions about hypnosis, Mary decided to proceed. In her first hypnotic experience she quickly entered a deep trance, but thereafter she resisted entering trance. Subsequent attempts to use hypnosis elicited profound fears of being harmed when in a vulnerable position; in fact, her apprehension intensified with every successive attempt.

When we explored the situation together, she revealed that she had discovered that while using hypnosis in my office unsettled her, she was comfortable with the idea of attempting to use it at home. We developed imagery that she found congenial and reassuring, and included it in recorded scripts. She used these recordings in the privacy of her own home, and she even began to create scripts of her own for me to record for her.

With this approach, Mary experienced a slow but gradual improvement in her ability to sleep. However, during times of increased stress, her fears escalated and she found it difficult to sleep at all. Suffering with exhaustion, she began to use self-hypnosis to sleep at her desk at work in short spurts because she had begun to feel safer there than in her bed at night. Mary wrote out a special script to use for such "powernaps." She took these steps without informing me.

When I learned what she was doing, I became concerned that she might not be fully alerted after using self-hypnosis at work, and suffer some unwanted consequences. While I was not made aware of whether there was some underlying problem determining these symptoms and their exacerbations, I thought it might be helpful to offer a way to enhance her mastery of her self-hypnotic efforts, and her safety in employing them.

I introduced the HAS as a tool to assist her with alerting. Mary rapidly appreciated that using the HAS immediately improved her ability to alert herself more completely. In her own words, "When I was thinking of the scale I was aware of this difference in alertness—without it I was groggy afterwards." Mary incorporated the use of the HAS into her practice of self-hypnosis thereafter.

Elise, whom I discussed in Vignette #1, informed me (well after the fact) that she had also used the hypnotic skills she had acquired for smoking cessation to help her cope with anxiety during a medical procedure.

Elise refused chemical anesthesia for an upcoming flexible sigmoidoscopy because accepting anesthesia meant that she would have to rely on someone else to drive her

home after the procedure, and she refused to be in a dependent position with respect to anyone. Although her gastroenterologist was very concerned about her experiencing pain during the procedure, she insisted on developing hypnotic anesthesia using the techniques she had learned in our work together. She was pleased to find that just before the procedure she was readily able to experience herself, deeply in trance, engrossed in her favorite hypnotic imagery.

However, after the procedure, when she was told she could go home, she realized that she felt "dizzy and uncoordinated." Initially, Elise thought she was experiencing a problem related to the procedure, but then she remembered using the HAS in her treatment, and it occurred to her that perhaps she was not fully alert. When Elise assessed her alertness compared to her recalled baseline alertness when she used the HAS, she realized she was indeed not fully alert. She had not returned to her customary baseline level of alertness.

Elise elected to remain in the waiting area at the office until she could fully alert herself more completely. She told me that she found it much more difficult to alert herself without having used the scale to obtain a baseline measure of alertness. Consistent with her ferocious need for autonomy, she realerted herself repeatedly until she felt back to her usual baseline, and drove home.

Discussion

One of the difficulties encountered in studying endeavours to improve realerting after hypnosis has been the problem inherent in differentiating the trance state from the normal alert state. The trance state may encompass a wide variety of possible phenomena, in combinations differing considerably from individual to individual. Some of these phenomena may be very difficult for either practitioner or subject to detect (Kluft, 2012d). Therefore, efforts were made to focus on alertness and its restoration rather than the removal of trance; that is, to establish a pre-hypnotic baseline statement benchmarking the subject's sense of alertness, and examining to what extent that benchmarked phenomenology had been restored or reconstituted subsequent to realerting.

Since the time of Braid, hypnosis has often been thought to be akin to sleep and inversely related to alertness, a misunderstanding that is reinforced through concretizing and misunderstanding the metaphors commonly used in both induction and alerting. Braid himself, when he realized that hypnosis was not in fact related to sleep, attempted to change the name to monoideaism but was unsuccessful (James Braid Society, n.d.). Parallel confusions are noted in the field of sleep research, in which researchers have identified the importance of alertness as a key construct necessary to understand the factors that modify alertness (Shapiro et al., 2006). Sleep research has also identified the existence of "hybrid states" in a study in which lucid dreaming was found to be a hybrid state encompassing qualities of both REM sleep and waking consciousness (Voss,

Holtzman, Tuin, & Hobson, 2009). Shapiro et al. (2006), among others, have developed practical measurement tools to evaluate changes in alertness in the context of sleepiness. In both areas of study it has proven crucial to recognize that the often-perceived polarities of hypnosis and non-hypnosis, sleep and wakefulness, are inaccurate and misleading. Rather than being opposites inverse to one another, they are complex, multifaceted, and distinctly interrelated phenomena.

If we consider hypnosis as a phenomenon that modifies alertness, and the process of hypnosis as a transition from a normal alert state to an altered alert state, in this stance, consistent with the definition of hypnosis offered by Spiegel and Spiegel (2004), we are better positioned to avoid this polarized and polarizing misperception.

The HAS is designed both to assist subjects to appreciate and understand the ways in which their subjective alertness may be modified by hypnosis, and to provide clinicians and subjects alike with a measurement tool to ensure full alerting in hypnosis. The HAS encompasses a strong psychoeducational element that clarifies the nature of hypnosis as an altered alert state and establishes the goal of dehypnosis as the restoration of the baseline alert state. In my experience, it is strongly supportive of the therapeutic alliance. This is achieved by means of increasing the sense of safety through decreasing fears, and, more importantly, by establishing a process of collaboration that builds a strong foundation for working together.

In using the HAS, I have observed an overall decrease in my patients' difficulties with realerting, a decrease in their expressions of confusion concerning whether or not they are alert (i.e., out of trance), and a general increase in the level of post-hypnotic subjective alertness that they report. I find that my patients are usually able to recognize and report if they are not fully alert immediately following dehypnosis, and often then fully alert themselves using the knowledge they had acquired pre-hypnotically about recognizing their baseline alert state. This has carried over well to self-hypnotic exercises between sessions as well.

The importance of the principal concept inherent in the HAS, the recognition of the hypnotic state as an altered alert state, manifests clearly in the vignette concerning the young man in a hypnosis workshop practice group who did not understand that he could still be experiencing the effects of trance, even with his eyes wide open. His view of hypnosis did not encompass either an understanding of how alertness may change with hypnosis, or skills that enabled him to identify such changes. Further, his thinking process, still reflecting the impact of trance, remained concrete, impairing his ability both to understand his experience and others' attempts to explain his situation to him. This illustrates the importance of including the establishment of the subject's awareness of his or her baseline alertness before the use of trance. In this example, I was assisting after the efforts of a neophyte operator had failed to bring about adequate dehypnosis. I entered a situation in which HAS itself had not been used to establish a baseline. However, I was able to use the concepts inherent in the scale by drawing a graph that illustrated the concept of overlapping states of consciousness in a manner that he found clear and easily understood. Thereafter, effective dehypnosis was readily achieved.

An alertness test that is easily understood and can be implemented very quickly is especially useful in workshop settings in which a conjunction of many factors, such as

the lack of experience and knowledge of the participants, the frequency of their trance experiences, and their lack of an ongoing clinical relationship with the operator contribute to subjects being increasingly at risk for and vulnerable to unwanted reactions. Such a test could more readily help identify subjects who are having difficulties with alerting, and mobilize workshop staff to intervene and protect these subjects from adverse outcomes or reactions (Kluft, 2012a, 2012b, 2012c, 2012d).

In clinical practice I have observed that including the HAS when I am providing psychotherapy facilitated by hypnosis results in significant improvement in my ability to work with patients whose fears of loss of control are mobilized by their misgivings about hypnosis. The consistent collaborative use of an alertness scale can be helpful for those who remain afraid in spite of general psychoeducation and reassurance about hypnosis. The therapeutic alliance is strengthened by emphasizing the importance of the patient's subjective experience and enlisting the help of the subject as a partner in alerting not only in word, but indeed, a concrete demonstration of collaborative partnership. This is particularly important in traumatized individuals, for whom trust is a persistent concern.

Both the fear of losing control and the fear of being controlled were addressed in the case of Elise (Vignette #1), a survivor of severe childhood trauma. The HAS provided her with a window into understanding of the hypnotic experience, the skills she needed to recognize any changes she experienced with trance, and the confidence that she would remain in control and able to alert herself. This made it possible for her to overcome her fears and utilize hypnosis for smoking cessation. The use of an alerting scale holds the potential to make hypnosis available to persons who otherwise might have been too frightened to consider or participate in this modality. To frightened patients, attention to the benchmarked state of mind elicited by the scale offers the breadcrumbs they can use to make their way home.

Our patients bring their own individuality, creativity, and personal agendas to their treatments. In Vignette #3, I described two patients who used the HAS in the context of self-hypnosis. Mary did so to facilitate her realerting from hypnotically-induced "power naps" in the workplace. She wanted to assure herself that she was completely awake after her naps by rating her alertness using the alerting scale prior to using hypnosis to induce the naps at her desk, and then again after waking up from auto hypnotically-induced sleep. Elise, discussed in both Vignettes #1 and #3, used the scale to help her alert herself fully after using self-hypnosis to undergo a medical procedure. In both these cases, the patients expanded the use of the HAS beyond what was taught to them during their treatment. These patients clarified for me that teaching self-hypnosis should begin with teaching self-alerting. Measuring baseline alertness and using an alertness scale may prove a very useful adjunct in many settings in which complete realerting after trance is crucial to the subject's effectiveness, well-being, safety, or myriad other relevant concerns.

At this point in time, however, the HAS remains a clinical tool, validated only by the experience of the author and others who have put it to extensive use (e.g., Kluft, 2012a, 2012b, 2012c, 2012d, 2012e). While its usefulness has been sufficiently established for it to be

recommended for universal inclusion in basic hypnosis workshops (Kluft, 2012b, 2012c) and it actually has been made part of several ASCH and SCEH educational programs, and advocated for the stabilization of dissociative patients during trauma therapy (Kluft, 2012c), future research will be necessary to establish its reliability and construct validity, and to evaluate it more objectively and thoroughly. It is possible that advances in neuropsychophysiology (Gruzelier, 1998; Raz & Landry, 2015) may permit a more objective assessment of the range of states under discussion, but the possibility and practicality of applying such methodologies to clinical practice is speculative, an exploration for future scholars.

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