

## **Mind Styles and The Hypnotic Induction Profile: Measure and Match to Enhance Medical Treatment**

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### **Abstract**

Modern medical technology and economic impositions tend to dehumanize the medical patient. This paper describes a targeted use of the hypnotic modality for relationship building, symptom management, and restoring a sense of self to the patient. To humanize medical care one patient at a time, examples are given for the use of the Hypnotic Induction Profile, the Eye Roll sign and AOD (Apollonian – Odyssean – Dionysian) Mind-Style Questionnaire as a basis for choosing bio-psycho-social treatment strategies. This trio of assessments can be used together, in approximately 10 to 15 minutes, or separately, if treatment decisions need to be made in a few minutes or less. The hypothesis presented is that matching treatment strategies, with or without formal hypnosis, to hypnotic capacity and mind style can increase respectful care and efficacy of treatment outcome. Clinical examples will illustrate this approach to enhance recovery, morale, and maximize patients' ability to become active partners on their own behalf.

**Keywords:** Hypnosis, efficacy, medical treatment, Hypnotic Induction Profile, measurement.

The hypnotic modality is a practical and effective way to help people cope with major medical problems and all forms of life stress. A variety of therapeutic approaches and applications have been developed for people who are in immediate crisis as well as those facing chronic problems – sometimes involving matters of life and death (H. Spiegel & D. Spiegel, 2004; H. Spiegel, Greenleaf & D. Spiegel, 2005). Whether for medical patients facing mastectomy, breast reconstruction, ovarian cancer, organ transplants, open heart surgery, prostate cancer, radiological procedures, orthopedic repair, accident victims, chronic illness,

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and more; patients can learn to alter physiological responses and manage psychosocial issues (Anderson, Frischholz & Trentalange, 1988; Frischholz & Tryon, 1980; Ewin, 1999; Ginandes & Rosenthal, 1999; Ginandes, Brooks, Sando & Aker, 2003; Greenleaf, 1992; Greenleaf, Fisher, Miaskowski, & DuHamel, 1992; Kessler & Dane, 1996; Lang, Joyce, D. Spiegel, et al, 1996; Lang, Benotsch, Fick, et al, 2000; Lynch, 1999; Montgomery, Weltz, Seltz & Bovbjerg, 2002; Pinnell & Covino, 2000; D. Spiegel, 1993; H. Spiegel & D. Spiegel, 2004; H. Spiegel, Greenleaf, D. Spiegel, 2005). Attitude, morale, perception and mental focus can and do make a critical difference in coping, healing, and recovery. Sensitivity to the non-specific factors of belief systems in the healing process enhances the possibility of positive treatment outcome (A. Shapiro & E. Shapiro, 1997).

### **Becoming a Patient: Frontline Issues**

As benefits increase from high-tech medicine and advances in medical specialization, many individuals are faced with making a “degrading shift from person to patient” (Carey, 2005). There are a wide variety of psychological and physical demands involved in undergoing diagnostic procedures, surgical interventions, and potentially toxic treatments. Mammography, sonograms, biopsies, chemotherapies, thallium stress tests, MRI’s, cardiac catheterizations, organ transplants — to name but a few — bring on high anxiety. Patients and loved ones are forced to deal with the unexpected. In addition, while dealing with the stressors of medical practice, personal identity is often threatened as the patient and family members become part of an impersonal bureaucratic system.

When faced with the necessity of undergoing such procedures, specialized knowledge is needed by professional care givers to make good decisions about how to help persons cope and cooperate under stress (Greenleaf, 1992).

In general, people begin this journey seriously uninformed and unprepared. At the same time a person needs supportive help to manage the healthcare system, medical specialization tends to complicate coordination of care and may strain doctor-patient relationships (Carey, 2005). Under pressure from HMO’s, insurance companies, hospital administrations or the government, physicians are forced into ever higher volumes of patients and lower staffing. Hospitals themselves are driven to get patients out faster — sometimes with their wounds still draining — following the dictates of what insurance companies will and will not pay for (Bogdanich, 1991). For the patient and loved ones, a sense of isolation and being lost in a foreign territory intensifies feelings of helplessness and anxiety (Gross, 2005). Waiting for a diagnosis or prognosis — be it for a few hours or a few weeks — can compound the stress of the original physical insult. Fear and anxiety and the helplessness that accompanies them are powerful enemies of healing and recovery.

While much has been written about spontaneous trance under conditions of psychological trauma and physical abuse (Kluft, 1999; D. Spiegel, 1996; H. Spiegel & D. Spiegel, 2004), there are also spontaneous trance states (or “Trance-Equivalent States,” Ewin, 1999), that occur to accident victims, combat casualties and medical patients under the stress of physical trauma, acute medical problems and hospitalization (Greenleaf, Fisher, Miaskowski, & DuHamel, 1992; H. Spiegel, 1997, H. Spiegel, 2000).

Most hospital settings isolate patients from their usual reference points, create conditions which diminish executive control, intensify focused attention, and foster a milieu in which signals and comments take on the power of external hypnotic suggestions. These are the same variables we help the patient master for successful induction procedures with

intentional formal hypnosis. But when patients and professionals are unaware of these factors, patients are at considerable risk from their own fear as well as careless negative comments from loved ones and staff. In research at the Albert Einstein College of Medicine, our data suggested that highly hypnotizable patients were so sensitive to the suggestive influence of the noisy and confusing atmosphere of the Intensive Care Unit, they had significantly longer periods of unstable blood pressure compared to those in the mid-range and low end of hypnotizability (Greenleaf, Fisher, Miaskowski & DuHamel, 1992). In addition, many medical patients suffer from a *nocebo* effect (H. Spiegel, 1997) when statements from hospital personnel and family members make dire predictions for the effects of treatment, recovery and the diagnosis itself. Most practitioners dealing with sophisticated pain management approaches and rehabilitation are aware of the negative impact when anyone warns: “This is really going to hurt” or “You’ll never have full range of motion again.”

As the hospital setting unwittingly encourages spontaneous trance states, communication from all hospital personnel to patients becomes crucial. It may be in dealing with a patient suffering from horrific burns, accident victims being rescued at the scene or patients coming out of anesthesia in the Intensive Care Unit. Helping the patient focus attention away from fear and pain with suggestions for safety, comfort, healing, and recovery can make a significant difference in outcome. Such phrases as: “Imagine cool breezes blowing on your body,” “Everything you need for your recovery is here for you,” “These are soft plastic tubes made to fit your body, bringing you everything you need for your comfort and healing,” have been demonstrated to decrease morbidity and mortality in the ER, with EMT workers and in the ICU, enhancing morale, healing and recovery (ASCH, 1976; Greenleaf, 1994; Ewin, 1999).

### **Concepts, Paradigms, Definitions, Situations and Assessments which Influence Our Role as Therapists**

In some instances, such as dermatological disorders, GI disturbances, headache, disturbances of circulatory function, burns, skin grafting, pain syndromes, insomnia, anxiety disorders, and respiratory problems, therapeutic goals may focus on immediate symptom relief and potential cure. In many instances, the therapeutic focus will be to enhance healing, recovery, a sense of mastery and the ability to deal with loss. Whether to cure, relieve symptoms or provide comfort, the hypnotic modality is a powerful medium to reverse the dehumanized and dependent position that people fall into as a consequence of a high tech care delivery system. If we conceptualize the hypnotic state as a way to utilize healthy brain-mind activity to focus attention and control imagination, we can help medical patients influence perception, morale, and physiology to re-humanize their status and help them regain a sense of personal identity.

In the late 18<sup>th</sup> century, hypnosis was thought to be a powerful energy that projected a magnetized state onto the patient. In this paradigm, the emphasis was placed on harnessing external forces to get someone into trance. For the early practitioners, such as Gassner and Mesmer, the concept of individuals being able to activate their own healing was unimaginable (Peter, 2005). In the 21<sup>st</sup> century, “external forces” are more commonly defined as psycho-social-spiritual factors that influence whether or not a person will go into trance and choose to activate bio-psycho-social mechanisms and levels of consciousness. On a case by case basis, individual differences will guide the practitioner to select approaches which meet a patient’s need for self-identity and independence. If there is too much emphasis on what the

therapist is doing to a person, the message to the patient gets blurred. Are patients dependent on the ministrations of the therapist and forces outside of themselves or are patients, when able, being encouraged to be active partners in their care?

Current data associates the hypnotic state with a trait (Hilgard, 1965, 1975; Horton, Crawford, Harrington, et al, 2004; H. Spiegel & D. Spiegel, 2004; Raz, 2005). This trait manifests as an innate capacity/ability to shift states of consciousness and varies on a spectrum from low to high hypnotizability. The resulting experience for the patient (or subject) is a reflection of genetically endowed talent and psycho-social influences but not a projection of the hypnotist's power. In the therapeutic dyad, there is always the possibility of using persuasion or creating pressure on the patient to comply, but this is most likely to create a short-lived response and diminish self-mastery. It is more effective to balance measurable internal biological variables with external social influences.

Working with medical patients, it is useful to clarify trance as: 1) an attentive, receptive state of concentration in which imagined activity and suggestion can be used to alter bio-psycho-social-spiritual phenomena; 2) a state of consciousness which can occur spontaneously, through guidance or be purposely self-induced; 3) determined by the degree of hypnotizability and the situational factors in a particular individual at a specific moment in time; and, 4) a talent which is biologically determined and enhanced with motivation. It is up to the clinician to maximize his or her specialty and training to implement relevant therapeutic strategies. For the practitioner, the patient and the healthcare team, it is important to remember that trance alone is not therapy (Frischholz, 1997; Frischholz & D. Spiegel, 1983), nor will every patient be capable of the same results (Montgomery, DuHamel, & Redd, 2000; D. Spiegel, Frischholtz, Fleiss, et al, 1993; H. Spiegel & Greenleaf, 1992; H. Spiegel & D. Spiegel, 2004).

Different situations require different approaches. In an acute medical emergency, specific direction and strong guidance may be required to instruct the patient to experience comfort and security. When the emergency phase subsides, we are likely to be more therapeutic if we define ourselves as teachers and facilitators who can instruct patients to activate trance at will and assist them to have more control over the way they choose to feel, act and be. We have a special opportunity to convey respect for the individual when the situation permits us to present trance as a self-generated experience and help patients participate in their own care. In both the acute and less acute phases, we can help neutralize the distance and sense of being alone that exists between the patient and the health care delivery system as reported by Gross (2005).

Using appropriate clinical assessments is also an important step to develop a bond of mutual respect and trust (H. Spiegel & Greenleaf, 2005-06). When the approach is one of collaboration, assessments can help patients feel acknowledged and optimistic in their own ability to respond to interventions. Someone is paying attention to who they are. Hypnotic inductions and treatment strategies then become a bridge to transmit caring, comfort, and respect; to maximize patient participation; and to enhance feelings of independence and mastery over anxiety, fear, and anger. The ultimate success of an intervention facilitated by hypnosis will depend on the match between what we do and individual differences related to the patient's coping style, their motivation and their hypnotic capacity/ability (Greenleaf, 1992).

#### *Components of Trance Capacity/Ability and Treatment Responsivity*

Clinicians and researchers have identified the degree to which an individual can

experience trance as a capacity or an intrinsic ability (Hilgard, 1965; 1975; H. Spiegel & D. Spiegel, 1978; 2004). Recent experiments found significant differences between those who test high and low on hypnotizability in top-down brain activity to control reactions to sensory stimulation (Kosslyn, Thompson, Costantini-Ferrando, Albert & D. Spiegel, 2000; Raz, 2005) and in brain physiology (Horton, Crawford, Harrington & Downs, 2004). Measurement of hypnotizability with the Hypnotic Induction Profile (HIP), reveals a range of trance capacity with different subjects from 0 to low, to mid-range and high (H. Spiegel, 1977; H. Spiegel & D. Spiegel, 1978; 2004). With recent data on brain physiology helping differentiate responses in high's and low's, disciplined measurement permits the clinician to be more attentive to individual differences in patients (Greenleaf, 1992; H. Spiegel, 1981; H. Spiegel & Greenleaf, 1992; H. Spiegel, Greenleaf & D. Spiegel, 2005).

Evidence suggests there are three components necessary to experience trance – the ability to *dissociate* (Morgan, 1973), which is biologically determined and correlates with vertical movement of the eyes (Frischholz, Lipman, Braun & Sachs, 1992; H. Spiegel, 1972), the ability to become *absorbed* in a specific thought, feeling or task which is influenced by biological and social factors (Frischholz, D. Spiegel, Trentalange & H. Spiegel, 1987), (medication, depression, delirium states, dementia, etc. can impair the ability to concentrate); and *suggestibility*, which is primarily influenced by personality features and social variables (Hammond, Garver, Mutter, Crasilneck, Frischholz, Gravitz, Hibler, Olson, Schefflin, H. Spiegel, & Wester, 1994; H. Spiegel & D. Spiegel, 1978; 2004). These components can be defined as follows:

1) *Dissociation* is a conscious and/or unconscious separation of memory, perception or motor response from one's main theme of awareness. This may manifest as an adaptation to stress in a healthy or pathological manner. In a person who is hypnotizable, the dissociated state is reversible. The capacity for dissociation seems to be biologically determined and is reflected in the mobility of the external ocular eye muscles. Braid reported in 1843 that an upward eye gaze indicated that a patient could be hypnotized "most rapidly and intensely."

2) *Absorption* is the ability to decrease peripheral awareness to facilitate greater focal attention. This allows the mind to act as a psychological "zoom" lens. As attention becomes more intense and focused, there is less awareness of orientation in time and place. The intensity and duration of absorption is influenced by bio-psycho-social factors of intelligence, interest and motivation. Absorption is diminished by attention deficits, impaired concentration from physical disorders, psychopathology and some medications.

3) *Suggestibility* is a proneness to perceive and accept signals and information with a relative suspension of customary critical judgment. Motivation, secondary gain or loss, and the degree to which one can suspend cognitive process will have an effect on suggestibility. For the highly suggestible person, response to input can be almost compulsively compliant. The social setting or contextual atmosphere influences the nature of the compliant response.

The characteristics of the trance experience, which include these three components plus the ability to maintain a ribbon of concentration and achieve flow, are specifically assessed by the Hypnotic Induction Profile. The scores indicate a difference in magnitude as well as the qualitative experience of the individual patient/subject.

#### *Mind Styles as a Roadmap for Treatment Planning and Outcome*

Three distinct mind styles, associated with the range from low to high hypnotizability,

emerge as a result of the way dissociation, absorption and suggestibility interact and become the roadmap for developing appropriate treatment strategies (Greenleaf, 1992; H. Spiegel & Greenleaf, 1992; H. Spiegel, Greenleaf & D. Spiegel, 2005). These styles are assessed in terms of space awareness, time perception, thinking vs. feeling, interpersonal control, trust, critical appraisal (how judgmental when learning something new), degree of personal responsibility, and preference for closeness or distance when learning something new. This information is important in determining an approach and treatment strategy for each individual. This author uses a rapidly administered 10 question survey (See Appendix), formerly called the Apollonian-Odyssean-Dionysian Cluster Survey (H. Spiegel & D. Spiegel, 1978; 2004; H. Spiegel, Greenleaf & D. Spiegel, 2005), now called the Mind Styles Questionnaire (H. Spiegel, 2006) for the speed with which it identifies where an individual fits on a thinking-feeling spectrum. A biological indicator associated with these mind styles is the Eye Roll sign (ER), the vertical upward movement of the eyes on a range from 0 - 4, represents the spectrum from Apollonian to Dionysian (H. Spiegel & D. Spiegel, 1978; 2004; H. Spiegel, Greenleaf & D. Spiegel, 2005).

On one extreme, the *Apollonian*, named after the Greek god Apollo who was guided more by reason than emotion, shows less flexibility in responding to new stimuli and tests at the low end of hypnotizability with the Hypnotic Induction Profile (HIP). Apollonians favor information, logic, analytical thinking, a stance of vigilance and cognitive dynamisms. On space awareness, they tend to maintain peripheral awareness even when absorbed in watching a movie or a play; in time, they focus most of their attention on past and future; they give priority to their “brain-minds” rather than their “heart-minds;” they prefer to be in charge themselves rather than let someone else take over; they are more skeptical than trusting; they judge things critically at the time of presentation; they are above average in taking responsibility for their actions; they prefer to figure things out rather than dream them up and they are prone to take a lot of notes.

For the psychologically intact “low,” the hypnotic modality can facilitate treatment strategies which feature analysis, learning, cognitive exploration and problem solving. Motivation and issues of secondary gain and loss are strong mediators which can add or detract incrementally from the experience of hypnotic phenomena (Greenleaf, 1992). While this is true for all patients, those at the low end of hypnotizability can accomplish a great deal with hypnosis but it will take more effort – hence motivation becomes a most critical variable.

Under stress, the Apollonian with medical problems tends to avoid interpersonal connections, obsessively complain about details of care and can become extremely irritable. When a respectful interaction breaks through the anger, there is likely to be a highly accurate reporting of information. Clinical experience has shown that along with any psychological intervention, it is important to listen as a colleague, respond actively to expressed concerns, provide information, explain what is being done, why it is being done, what to expect, and to involve the patient in every way possible in decision making (H. Spiegel, Greenleaf, D. Spiegel, 2005). Apollonians prefer to be included in the decision making loop and do not tolerate surprises well (Greenleaf, 1992). Self-hypnosis can be taught after cognitive needs are satisfied as a way to maintain control. Staff involvement is critical. Apollonians need to be treated as colleagues and become active partners of the healthcare team. Many times the “resistant” behavior of an Apollonian will dissipate when the individual feels respectfully included in interactions with the professional staff.

At the other extreme, the *Dionysian*, named after the Greek god, Dionysus, was known for unrestrained and undisciplined spontaneous behavior. Testing high in

hypnotizability on the HIP, there is a strong tendency to be guided by emotion, a marked ability for total absorption, with an almost complete abandonment of peripheral awareness and a readiness to respond uncritically to new signals. Dionysians get so lost in what's going on, they can easily lose awareness of where they are; as they perceive time, they are mostly in the present (everything is "now"), and are guided predominantly by their "heart-minds." In general, they prefer to have others take over if they wish; they are very trusting (and this sometimes gets them into trouble); they take in new information uncritically; they may not feel very responsible for their own actions; when learning something new, they prefer intimate contact; they prefer to dream things up rather than figure things out, and they usually prefer to let things unfold rather than write things down.

To sum up, Dionysian individuals respond more with feelings than logic and rationality. Because they easily suspend critical judgment, they are most likely to comply with impositions from the outside. Of all the mind styles, they are the most ecologically sensitive and the most vulnerable to persuasion. Treatment strategies which focus on "what" to do rather than "why" problems developed can help them move forward. Structure, simplicity and clarity tend to be more helpful with those who favor dissociative dynamisms versus a cognitive analysis of the past (H. Spiegel, 1974; H. Spiegel, Greenleaf, D. Spiegel, 2005).

At the other end of the spectrum from the cognitive Apollonian, the Dionysian under stress is likely to collapse into depression or dissociative states, feel a loss of self, become extremely dependent on others and blame anything that goes wrong on their own sense of inadequacy. It is vital to create an environment which provides positive support and a clear direction. Too much detailed "why" information and the concern of family, staff or friends are rapidly internalized as "something is very wrong." Strategies with self-hypnosis can be used for emotional protection, comfort and to control dissociative experiences to cope better under stress. Dionysians respond quickly when told what to do and are the most likely to produce dramatic responses in symptom management which will then require on-going protection to maintain.

In the middle, the *Odyssean*, named after Homer's mythical man, Odysseus who wandered to find his way home. Testing in the mid-range on the HIP, the psychologically healthy Odyssean is a balancer and mediator. There is a tendency to oscillate between internal cues and sensitivity to social context and environmental cues; when absorbed in a task, the tendency is to fluctuate between focused attention and peripheral awareness; from the present to the past and future; between the brain-mind and the heart-mind (from thinking to feeling); from a need to control to a desire to have others take over; from trusting to non-trusting; from critical awareness to uncritical acceptance; from taking responsibility for one's own actions to avoiding responsibility for oneself; from choosing intimacy or distance; between dreaming things up and figuring things out; and vary on the need to capture things in writing. As almost 50% of the population falls into this mid-range group, it is most valuable to assess the variations of A, O & D characteristics to get a sense of where a particular individual falls on a spectrum of thinking – balancing – feeling.

The Odyssean under stress is likely to seek others as emotional anchors, but may vacillate between a fear of being controlled and a fear of being abandoned. When treatment or disease processes are difficult, the Odyssean is likely to vacillate between blaming oneself and blaming others seeking an emotional logic for difficulties. While there is more resilience in the mid-range than in the lows, it can be time consuming to sort out fact from fiction, but well worth the effort. With motivation, an Odyssean appreciates arriving at a balanced perspective. Self-hypnosis can be taught as a process to sort out goals, values, information

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and emotion. Empowerment comes from developing perspectives which access, mobilize and balance the individual's own resources.

Considering hypnotizability as a reflection of mind styles, the "cerebral" Apollonian may develop cognitive impairments, with avoidant interpersonal styles and proneness to despair. The "oscillating" Odyssean may develop problems of intimacy, fluctuating assumptions and beliefs with resultant confusion and is subject to mood swings. The "ecologically sensitive" Dionysian is prone to experience disruptions of self-integration, dependency to the point of helplessness and is vulnerable toward major depression.

With the Mind Style Questionnaire and the Hypnotic Induction Profile (HIP), these different features and variables are identified. With this information, it is easier for the therapist to select the most effective treatment strategy for the person in the given clinical context. When the administration of either assessment is not feasible, the Eye Roll sign alone will help indicate the potential for response and an appropriate treatment strategy. In a medical crisis this information can be sufficient. But the ER alone will not indicate any psychophysiological impairment in the ability to concentrate nor identify the specific mind style attributes of the individual.

Clarity in defining the phenomena helps us assess what we observe and what the patient experiences; sharpen our diagnostic skills; identify mind styles; and develop relevant treatment strategies. Individuals at the low end tend to be relatively fixed and controlling, and react to most situations with an internally driven agenda. A person in the midrange is more resilient and most likely to use both feeling and reason. Persons at the high end are likely to be so flexible and malleable they will be extremely sensitive to all external cues and the demands of a social milieu.

### Measure and Match – Case Examples

**Spontaneous Trance States** (triggered by external or internal stress that may or may not be identifiable):

There are numerous instances where dissociation, absorption and suggestibility are simultaneously activated during a crisis. Here are two examples:

#### *Case #1*

A hospitalized woman with metastatic cancer was referred to me by a nurse when the patient declared she was suicidal. She spoke of slipping into "death" states. On initial assessment, she was at the extreme end of high hypnotizability. Her "death experiences" were actually spontaneous trance states. Under the stress of hospitalization, her coping mechanism had been to dissociate. Because neither she nor her physician understood what was happening, they both became frightened. The diagnosis of suicidality had inadvertently created a nocebo response which could now be reversed by teaching the patient self-hypnosis.

Taking into account her high hypnotizability and Dionysian mind style, the treatment strategy was to provide the briefest possible explanation and a rapid (30 second) induction. "You have achieved a highly evolved state of meditation. It takes most people months, if not years, of practice to achieve what you did spontaneously. It was so unexpected and intense it frightened you. Yet you report you feel very serene and calm when this state comes over you. Now you know what it is and you'll be able to start it and stop it at will. You can use it as a respite to help you have the strength for your healing and recovery." The treatment



strategy was intended to maximize her ability to dissociate. She was given suggestions to imagine she was surrounded by her own private buffer zone of luminous serenity and taught to exit the trance state when she chose.

Within an hour of our initial meeting, she developed voluntary control of her levels of awareness and her (controlled) dissociated states became a source of comfort. Her appetite, verbal expressiveness and ability to ambulate returned within the hour. While in the hospital, she surprised the staff by becoming active in boosting the morale of other patients. On follow-up, she became engaged in planning activities for herself and her family after her hospital discharge. In some cases, appropriate early intervention has been found to prevent the development of a dissociative disorder (H. Spiegel, 2000).

#### *Case #2*

There are also spontaneous ‘hospital trance’ states which occur even in those who are less hypnotizable.

In the hospital, I was called “stat” to see a 48-year-old man who had acute chest pain. His heart rate was 190 and the team around him saw no positive effect on the monitor from the medications being administered. With no time for a full assessment of his mind style or his hypnotizability, he was asked to look up as high as he could and keep looking up while he lowered his eyelids. His Eye Roll Sign, a biological indicator for hypnotic dissociation, predicted little natural capacity for dissociation and low hypnotizability. But he could be observed to be in a spontaneous trance (dissociated and absorbed by his symptom, vulnerable to external suggestions) - due to the intensity of the crisis. Because of his low Eye Roll sign and presumed Apollonian mind style, the strategy was to guide the patient as rapidly as possible with a distraction technique under his own control and direction. “Look up, take in a deep breath, exhale and let your body float. Now go someplace in your imagination – any place you choose - where you can float and your body feels safe and well supported from underneath.” After a minute or two, the monitor registered his heart rate at 66 and he reported that his pain had floated away. The medical team, who had been standing by the monitors, took over. Both the staff and the patient were startled by the rapid reversal. Later testing with the HIP confirmed the original observation of three components of trance: dissociation, absorption and suggestibility. All were on the low side.

#### **Operator Induced Trance States**

There are numerous instances when a disciplined assessment provides information that may not be obvious on the surface. Here are five examples where medication effects, psychiatric diagnoses, degree of hypnotizability and mind styles dictated the choice of treatment strategies and determined the potential for positive results.

In a medical crisis, the ability of the “high’s” to go into trance rapidly and dissociate experience, can be utilized to help the patient gain control over their bodies and overcome difficulties in the immediate environment.

#### *Case #1*

A 35-year-old woman in a great deal of pain from metastatic disease was getting little relief in spite of being medicated with morphine. The consult was called by her physician for pain management. Assessed in the high mid-range on the HIP with a Dionysian mind style, she had ample capacity to use a strategy of controlled dissociation to control her pain. Rapid instructions for inducing a trance (Finkelstein, 2003) and a treatment strategy where she

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could monitor her symptoms but be free of discomfort were presented with instructions to activate trance on her own. In a few minutes she was able to respond to suggestions to “leave her body” and find comfort in an imagined place of refuge. Because she was on morphine, working rapidly with the induction and treatment strategy made a difference for her to remember what we had done and not fall asleep. While many times, sleep can be a useful respite from pain; in this situation it was important to help her stay in an awake state to learn a technique to create comfort on her own.

### *Case #2*

A hospitalized 14-year-old girl was struggling to deal with a brain tumor that had metastasized through her spine. Unable to sit in a wheel chair because of the pain, she was trapped in bed and socially isolated on the pediatric unit. A consult was called for pain management. She was highly hypnotizable and had a Dionysian mind style. The treatment strategies utilized her ability to enter into her own imaginary world, dream things up and allow them to unfold. She quickly learned to induce her own trance state by “floating.” Then, taking her religious background and trust in the power of prayer into account, suggestions were given for her to move the energy of prayer through her body to sooth, calm, cleanse and comfort. Using self-hypnosis to manage her pain, she could sit in a wheel chair and participate with other young people in the playroom - the center of social activity. At a later time, when she was bed-ridden by medical necessity, her mother was taught to help her daughter re-enter a trance state to emphasize the power of prayer and protection of her love. When mother and daughter interacted in this way, I noted dramatic changes in her daughter’s facial expression, self-reports of comfort and improvements in respiration (visible on a monitor). There was therapeutic gain for both the mother and the patient.

### *Case #3*

With “lows,” psychosocial interventions, not just formal hypnosis, tend to be more effective when cognitive in nature; geared to respect the patient’s need for great detail in the why’s and what’s of treatment choices; and, provide time for the patient to think things through.

A 48 year old woman, high up on the corporate ladder, was referred to me by her surgeon when she refused to go forward with a medically needed second mastectomy. When she came for help, she was in a state of high anxiety, paralyzing fear, and rage. After identifying her mind style as an Apollonian and her degree of hypnotizability as a low, the first task was to teach her techniques to regain control over her life and to use her thoughts to help her body respond better to the surgical procedures. All suggestions were focused on the expertise of the medical professionals she had selected and the benefits of treatment, i.e., “to accept treatment as your agent of care, with your surgeon and oncologist acting on your behalf to deliver the best medical expertise and high tech advancements. Rather than fight against what you now know you need, you can instruct your body to receive the benefits of each instrument and each medication.” An audio tape reinforced her ability to use her mind to instruct her body in how she wanted it to respond. Her second surgical recovery was remarkable for the speed and comfort levels of her healing process as compared to the first surgery. Subsequently, she was able to use these same techniques for post-op chemotherapy and radiation treatments.

Physiologically, her response to treatment was remarkable based on the lack of expected treatment side effects. She was the only patient in her chemotherapy group (the same patients

were in the waiting room at each treatment; none of whom were exposed to the tape) who did not experience the predicted nausea, vomiting and blackening of nails. Psychologically, the process of dealing with cancer had brought out old patterns of accommodating others and reluctance to ask for help. Part of the treatment strategy was for her to use her professional skills to know when to request support and when to maintain her privacy, just as she would in structuring situations in the work place, (See: Daniel, 1999; Lynch, 1999; Mutter, 1999; Hornyak, 1999, Linden, 1999 for a more thorough discussion of the role of hypnosis in women's health. Independent of degree of hypnotizability and coping style, women have specific needs to overcome helplessness and selflessness in taking care of their own medical problems.) With strategies emphasizing her use of self-hypnosis and self-control along with the audio tape, she became an active partner in her care. At the same time, she developed a personal support team that was under her direction. She shifted from helplessness, rage, and dependency to enhanced executive control under the duress of medical treatment. After treatment, she began to turn her life around, with a commitment to find her "song to sing."

#### *Case #4*

A man in his 60's was referred by his cardio-thoracic surgeon because of the patient's history of chronic claustrophobia. The surgeon, upon discovering this pattern of behavior, had refused to schedule open-heart surgery until the patient was "hypnotized." One goal was to teach the patient to control his fear of objects coming close to his face to prevent him from pulling out tubes and wires during the post-operative phase of surgery. Additional goals, basic to psychotherapy with formal hypnosis, were to enhance healing and recovery in terms of post-operative medication, return to fluid and food intake, recovery of ambulatory function and discovery of new levels of physical activity (Greenleaf, Fisher, Miaskowski, et al, 1992).

On assessment with the Mind Style Questionnaire, he was an Apollonian. On the HIP, he scored higher on hypnotic responsivity than his Eye Roll sign would have predicted. (This is technically considered an "Increment Profile Grade" (H.Spiegel & D, Spiegel, 1978; 2004) and indicates strong psychological motivation to respond positively beyond what his ER alone would have predicted.) As long as the treatment strategy matched his cognitive style, there was a high likelihood of therapeutic success. In a single session, he learned a self-hypnosis strategy to *instruct* his body in how he wanted it to respond before, during and after surgery. The induction techniques and suggestions were presented in a logical context – "when the body is at ease and accepting of treatment, everything goes more easily. Just as an athlete prepares for the game prior to his performance so his actions are automatic, so can you prepare your muscles, nerves, heart, digestive, circulatory and respiratory systems to cooperate with your surgeon and the equipment to enhance your comfort and ease of healing. Each instrument, tube, and monitor is made to fit your body, bringing you everything you need for healing and recovery." The suggestions were designed to appeal to his thinking mind.

After the therapeutic session, the staff was encouraged to treat him as a colleague. This was achieved by teaching the nurses, on all shifts, in the ICU to explain everything they were doing – even when he was still coming out of the anesthesia or appeared to be sleeping. Everyone involved in his care was instructed to teach him the whys and wherefores of the post-operative course with an emphasis on variables over which he would have choice and control. His recovery was remarkable for its absence of phobic behavior. He, and the staff, enjoyed his rapid and uneventful recovery. He made a dramatic transition from an obsessive,

anxiety ridden, high maintenance pre-operative patient to one who was self-empowered, easy to care for and back into action in record time.

#### *Case #5*

For patients in the mid-range, treatment strategies are geared to help them find balance. Such patients may oscillate in their need to organize, direct, and explore options. Assessing these variables can help us match the treatment strategy to the specific orientation of the patient at the time of our intervention.

The patient, a woman in her early 30's, was referred by her child's neuro-oncologist when he feared she might become suicidal after her child died from an inoperable brain tumor. Assessment revealed she had an Odyssean mind style and this resonated with a mid-range score on the HIP.

The prognosis was dire. The mother, overwhelmed by feelings of vulnerability and her impending loss, expressed her feelings: "I don't want to live if my daughter dies." None of the professionals involved in the child's care dared speak of the expected death.

To begin, there were three significant issues that had to be dealt with simultaneously. One was for her to find out what she could about her daughter's life expectancy. The second was how she could make the most out of the precious time she had left with her child. The third was to help this mother focus on living, for her daughter's sake as well as her own. With her Odyssean mind style, she emerged from a situational depression when she began to create balance out of the chaos of her child's illness and treatment. She took charge of who came and went when her child was hospitalized. She used self-hypnosis to quiet her emotions and shift into her logical self to get the information she needed from her child's physician. With a hypnotic strategy to look back from the future, she chose to take a leave of absence from her job, advocate for the most humane way to have medical care administered to her child, and place the emphasis on meeting both of their emotional needs during the last few months they would have together. She explored options, taking her feelings and thoughts into account. Using this balance, she created strategies to preserve the memory of her daughter, including how and when to select what would be kept after the child's death. This mother was able to make the most sensitive and thoughtful decisions possible to take care of herself as well as her child.

As a result of respecting her feelings and thoughts, she avoided the common dilemma of the Odyssean - to favor either thinking or feeling at the expense of one or the other. When the time came, she was able to grieve her daughter's death without guilt or regret. Ten years later, this woman has remarried, become an executive director of a non-profit foundation to prevent child abuse and completed a doctorate in social work.

#### **The Eye Roll Sign and Psychiatric Diagnosis**

There are many instances in which a psychiatric diagnosis can be clarified with the Eye Roll sign alone and/or the score on the HIP. (For details on correlations with AXIS I and AXIS II diagnoses see H. Spiegel, Greenleaf, & D. Spiegel, 2005; H. Spiegel & D. Spiegel, 2004.) Overall, conditions and psychiatric illnesses which manifest as cognitive impairments with obsessive features and rigidity correlate with ER's of 0-2 and low scores on the HIP; conditions and psychiatric illnesses which manifest as mood disorders and vacillations correlate with ER's of 2-3 and mid-range scores on the HIP; conditions and psychiatric illnesses which manifest as undisciplined emotional/dissociative states correlate with ER's of 3-4, with high scores on the HIP. When there is a positive discrepancy between the ER

and the HIP demonstrating more responsivity, there is great promise. When there is a negative discrepancy showing a lower score on the HIP than the ER might indicate, this predicts potential difficulties, sometimes temporary, in using the hypnotic modality. In some instances, there is a total break in the flow of concentration, scoring as no hypnotizability. The following cases are examples of patients with psychiatric diagnoses which interrupted cognitive flow.

*Case #1*

A 40-year-old woman with right arm paralysis and left arm spasticity reported severe pain. Upon psychiatric evaluation, the pain was diagnosed as “hysterical conversion.” The consult was called by her physician to treat her hysteria and relieve her pain and anxiety with hypnosis. Due to the impairment of her arms, it was not possible to use the HIP, but it was possible to measure her Eye Roll sign. She was a 1 (on a 0-4 scale). Data shows dissociative, conversion diagnoses correlate with Eye Roll sign scores with a mean of 3.5; schizophrenia and obsessive disorders correlate with ER scores with a mean of 1.5 (Frischholtz, Lipman, Braun, & Sachs, 1992). Hysteria was ruled out. Her ER score and the positive relationship that developed from our brief but respectful assessment encouraged her husband to disclose she had been previously diagnosed and treated for schizophrenia. Her current physical problems were related to tardive dyskinesia. The medical staff, totally frustrated in dealing with her, had been ready to destroy peripheral nerves in an attempt to numb her sensations of pain. Hypnosis was not possible; but her ER score made it possible to help clarify a psychiatric diagnosis. She subsequently received appropriate adjustments in her psychotropic medication.

*Case #2*

A 28-year-old man, diagnosed with schizophrenia was hospitalized with a cervical break. To keep his head and neck steady for the healing to take place properly, metal tongs on either side of his head were attached by a metal chain to an anchoring device on the wall to keep his head braced. Every time a nurse entered his room he responded with facial twitching and grimacing which spoiled the stillness he needed for recovery. A consult was called for hypnosis to help him relax in the presence of hospital care givers. Assessment with the HIP revealed he was not hypnotizable. He demonstrated the lack of flow in his ribbon of concentration typical of schizophrenia (D. Spiegel, Detrick, & Frischholz, 1982; H. Spiegel & D. Spiegel, 1978). Since he desperately needed help, a treatment strategy was necessary. Discovering he loved cotton candy, he was asked to imagine his mouth full of cotton candy and his whole face relaxed. Because he was not hypnotizable, he could not internalize the instructions nor activate the mental image at will. Instead, the nurses and family members were taught to remind him repeatedly of “cotton candy.” Instead of upsetting him, the nurses became part of the solution to keep him calm when they entered his room and maintain the immobility which was crucial to his healing.

### **Conclusion**

We are now in a position to differentiate among procedures used to activate trance, the subjective response of the person who is in the trance state, and quantifiable differences in the way individuals enter into and respond while in the trance state. With knowledge of the phenomenology of hypnosis, the spectrum of hypnotizability and the compassionate

use of assessments, we can more easily identify a patient's unique mind style and the bio-psycho-social resources of the individual. This information can help us humanize care and provide a roadmap to select more efficacious treatment strategies for medical and surgical patients before, during and after treatment. Case examples illustrate the hypothesis that identifying individual differences in mental processing and capacity for change with the ER, HIP & AOD Questionnaire can help healthcare providers make more rapid treatment decisions and increase treatment efficacy, i.e., measure and match. The cases presented exemplify a search to improve the ways we can empower patients to maintain or increase a sense of self-value and independence; collaborate more fully in treatment; and enhance the healing and recovery process.

### References

- Anderson, E.L., Frischholz, E.J., & Trentalange, M.J. (1988). Hypnotic and non-hypnotic control of ventilation. *American Journal of Clinical Hypnosis*, 31, 118-128.
- American Society of Clinical Hypnosis, (1976). Annual Meeting, Scientific Session; Panel on Medical Hypnosis, Dabney Ewin, Bertha Roger, Eric Wright, Chicago.
- Bogdanich, W. (1991;1992). *The great white lie*. New York: TOUCHSTONE: Simon & Schuster.
- Carey, B. (2005). In the hospital, a degrading shift from person to patient. *New York Times*, Aug 16: 1, 12
- Daniel, S. (1999). The healthy patient: Empowering women in their encounters with the health care system. *American Journal of Clinical Hypnosis*, 42(2), 108-114.
- DuHamel, K.N., Difede, J., Foley, F., Greenleaf, M. (2002). Hypnotizability and trauma symptoms after burn surgery. *Journal of Clinical and Experimental Hypnosis*, 50(1), 33-50.
- Ewin, D. (1999). Hypnosis in the emergency room. In Temes, R. (Ed.) *Medical hypnosis: An introduction and clinical guide*. p. 59-64. Philadelphia: Churchill Livingstone.
- Finkelstein, S. (2003). Rapid hypnotic inductions and therapeutic suggestions in the dental setting, *Journal of Clinical and Experimental Hypnosis*, 51(1), 77-85.
- Frischholz, E.J., Lipman, L.S., Braun, B.G., & Sachs, R.G. (1992). Psychopathology, hypnotizability and dissociation. *American Journal of Psychiatry*, 149, 1521-1525.
- Frischholz, E.J. (1997). Medicare procedure code 90880 (medical hypnotherapy): Use the code (not the word). *American Journal of Clinical Hypnosis*, 40(2), 85-88.
- Frischholz, E.J., Spiegel, D., Trentalange, M.J., & Spiegel, H. (1987). The hypnotic induction profile and absorption. *American Journal of Clinical Hypnosis*, 30, 87-93.
- Frischholz, E.J., & Spiegel, D. (1983). Hypnosis is not therapy. *Bulletin of the British Society of Clinical and Experimental Hypnosis*, 6, 3-8.
- Frischholz, E.J. & Tryon, W.W. (1980). Hypnotizability in relation to the ability to learn thermal biofeedback. *American Journal of Clinical Hypnosis*, 23, 53-56.
- Ginandes, C.S., Rosenthal DI (1999). Using hypnosis to accelerate the healing of bone fractures." *Alternative Therapies in Health and Medicine*, 5(2), 67-75.
- Ginandes, C.S., Brooks P, Sando W, Jones C, Aker J. (2003). Can medical hypnosis accelerate post-surgical wound healing? Results of a clinical trial. *American Journal of Clinical Hypnosis*, 45(4):333-51.
- Greenleaf, M. (1992). Clinical implications of hypnotizability: Enhancing the care of medical patients and surgical patients. *Psychiatric Medicine*, 10 (77), 77- 87.

- Greenleaf, M., Fisher, S., Miaskowski, C., DuHamel, K. (1992). Hypnotizability and recovery from cardiac surgery. *American Journal of Clinical Hypnosis*, 35 (2), 119-128.
- Greenleaf, M. (1994). Cancer and women: redefining the self. *Gynecologic Oncology Nursing*, 4(2), 14-18.
- Gross, J. (2005) Alone in illness, seeking a strong arm to lean on. *New York Times*, Aug 26, 1, 14
- Hammond, D.C., Garver, R.B., Mutter, C.B., Crasilneck, H.G., Frischholz, E.J., Gravitz, M.A., Hibler, N.S, Olson, J., Schefflin, A., Spiegel, H., & Wester, W. (1994). *Clinical hypnosis and memory: Guidelines for clinicians and for forensic hypnosis*. Des Plaines, IL: American Society of Clinical Hypnosis Press.
- Hilgard, E.R. (1965). *Hypnotic susceptibility*. New York: Harcourt, Brace & World.
- Hilgard, E.R. (1975). *Hypnosis annual review of psychology*, 26, 19-44.
- Hilgard, J.R. (1970). *Personality and hypnosis: A study of imaginative involvement*. Chicago: University of Chicago Press.
- Hornyak, L.M. (1999). Empowerment through giving symptoms voice. *American Journal of Clinical Hypnosis*, 42(2) 132-139.
- Horton, J.E., Crawford, H.J., Harrington, G., & Downs, J.H. (2004). Increased anterior corpus callosum associated positively with hypnotizability and the ability to control pain. *Brain*, 127, 1741-1747.
- Kessler, R. & Dane, J. (1996). Psychological and hypnotic preparation for anesthesia and surgery: An individual differences perspective. *International Journal of Clinical and Experimental Hypnosis*, 44 (3), 189-207.
- Kluft, R.P. (1999). Current issues in dissociative identity disorder. *Journal of Practical Psychiatry and Behavioral Health*, 5, 3-19.
- Kosslyn, S.M., Thompson, W.L., Costantini-Ferrando, M.F., Alpert, N.M., & Spiegel, D. (2000). Hypnotic visual alters color processing in the brain. *American Journal of Psychiatry*, 157(8), 1279-1284.
- Lang, E.V., Joyce J, Spiegel D, Hamilton D, Lee K: (1996). Self-hypnotic relaxation during interventional radiological procedures: Effects on pain perception and intravenous drug use. *International Journal of Clinical and Experimental Hypnosis*, 4(2):106-119.
- Lang, E.V., Benotsch, E.G., Flick, L.J., Lutgendorf, S., Berbaum, K.S., Logan, H., Spiegel, D. (2000). Adjunctive nonpharmacological analgesia for invasive medical procedures: a randomized trial. *Lancet* 355: 1486-1490.
- Linden, J. (1999). Discussion of symposium: enhancing healing: the contributions of hypnosis in women's health care. *American Journal of Clinical Hypnosis*, 42(2) 140-144
- Lynch, D.F. (1999). Empowering the patient: hypnosis in the management of cancer, surgical disease and chronic pain. *American Journal of Clinical Hypnosis*, 42(2) 122-130.
- Montgomery, G.H., DuHamel, K.N., Redd, W.H. (2000). A meta-analysis of hypnotically induced analgesia: how effective is hypnosis? *International Journal of Clinical and Experimental Hypnosis*, 48(2): 138-153.
- Montgomery, G.H., Weltz, C.R., Seltz, M., Bovbjerg, D. (2002). Brief presurgery hypnosis reduces distress and pain in excisional breast biopsy patients. *International Journal of Clinical and Experimental Hypnosis*, 50(1), 17-32.
- Morgan, A.H. (1973). The heritability of hypnotic susceptibility in twins. *Journal of Abnormal Psychology*, 82: 55-61.
- Mutter, K.L., (1999). Empowering strategies: the physician's point of view. *American Journal of Clinical Hypnosis*, 42(2), 116-120.

- Peter, B. (2005). Gassner's exorcism-not mesmer's magnetism-is the real predecessor of modern hypnosis. *International Journal of Clinical and Experimental Hypnosis*, 53 (1): 1-14.
- Pinnell, C. M., & Covino, N.A. (2000). Empirical findings on the use of hypnosis in medicine: A critical review. *International Journal of Clinical and Experimental Hypnosis*, 48:170-194.
- Shapiro, A. & Shapiro, E., *The powerful placebo: From ancient priest to modern physician*. Baltimore: Johns Hopkins University Press.
- Spiegel, D. & Classen C. (2000). *Group therapy for cancer patients: A research-based handbook of psychosocial care*. New York: Basic Books
- Spiegel, D. (1996). Hypnosis in the treatment of posttraumatic stress disorder, In *Casebook of clinical hypnosis*, p. 999-111, Eds. Lynn S., Kirsch I. & Rhue, J. Washington, DC: American Psychological Press, .
- Spiegel, D. (1993). Psychosocial interventions in cancer. *Journal of the National Cancer Institute*, 85, 1198-1205.
- Spiegel, D., Detrick, E., & Frischholz, E.J. (1982). Hypnotizability and psychopathology. *American Journal of Psychiatry*, 139, 431-439.
- Spiegel, D., Frischholz, E.J., Fleiss, J.L., & Spiegel, H. (1993). Predictors of smoking abstinence following a single-session restructuring intervention with self-hypnosis. *American Journal of Psychiatry*, 150: 1090-1097.
- Spiegel, H. & Greenleaf, M. (1992). Personality style and hypnotizability: The fix-flex continuum. *Psychiatric Medicine*, 10(1), 13-24.
- Spiegel, H., Greenleaf M., & Spiegel D. (2005). Hypnosis: An adjunct for psychotherapy. Chapter in: *Kaplan & Sadock's Comprehensive textbook of psychiatry*, 8th Ed., 2548-2568. Virginia: Lippincott, Williams & Wilkins.
- Spiegel, H. & Greenleaf, M. (2005-06). Commentary: Defining hypnosis. *American Journal of Clinical Hypnosis*, 48(2-3): 111-116.
- Spiegel, H. & Spiegel, D. (1978). *Trance and treatment: Clinical uses of hypnosis*. New York: Basic Books, Inc.
- Spiegel, H. & Spiegel, D. (2004). *Trance & treatment: Clinical uses of hypnosis*. 2<sup>nd</sup> Edition, Washington, DC: American Psychiatric Press.
- Spiegel, H. (1972) An eye-roll test for hypnotizability. *American Journal of Clinical Hypnosis*, 15: 25-28.
- Spiegel, H. (1974) The grade 5 syndrome: The highly hypnotizable person. *International Journal of Clinical and Experimental Hypnosis*, 22: 303-319
- Spiegel, H. (1977). The hypnotic induction profile (HIP): A review of its development. *Annals of the New York Academy of Sciences*, 21:129-142.
- Spiegel, H. (1997). Nocebo: the power of suggestibility. *Preventive Medicine*, 26 (5) 616-621.
- Spiegel, H. (2000). Silver linings in the clouds of war: A five-decade retrospective. In: Menninger R & Nemiah J: *Post WW II history of American psychiatry*, p. 52-71. Washington DC: American Psychiatric Press.
- Spiegel, H (2006). The neural trance: A new look at hypnosis. Invited address: The Herbert Spiegel Lectureship, Department of Psychiatry, Columbia University, College of Physicians & Surgeons.



**Appendix**

*The AOD (Apollonian – Odyssean – Dionysian) Mind-Style Questionnaire*

Answer the following questions as honestly and spontaneously as you can. There are no “right” or “wrong” answers.

1. **SPACE AWARENESS:** As you concentrate on watching a movie, or a play, do you grow so absorbed in what is going on that you lose awareness of where you are? If “no,” circle “A”. If “yes,” clarify further by asking, “Do you ever get so absorbed that when it’s over, you are surprised to realize you are “sitting in a theatre?”

If “no”, circle “A” A

If “not that much” or “it depends”, circle “O” O

If “yes”, circle “D” D

2. **TIME PERCEPTION:** In general, as you perceive time, do you focus more of your attention upon the past, present, or future, or all three equally? Roughly, off the top of your head, how would you put that in percentages?

If past or future, circle “A” A

If all three, circle “O” O

If present, circle “D” D

3. **MYTH-BELIEF CONSTELLATION:** The French philosopher Pascal once said, “The heart has a mind which the brain does not understand.” He posited there are two kinds of minds, the heart-mind and the brain-mind. As you know yourself, which of these two minds do you give priority to?

If brain-mind, circle “A” A

If both or variable, circle “O” O

If heart, circle “D” D

4. **INTERPERSONAL CONTROL:** As you relate to another person do you prefer to control the interaction, or do you prefer to let the other person take over if they wish?

If your spontaneous answer is “control the interaction,” circle “A” A

If both or “it depends,” circle “O” O

If control is readily given to the other person,” circle “D” D

5. **TRUST PRONENESS:** Are you prone to trust other people? Where would you place yourself, compared to others, on a scale of average, above or below average?

If low or below average, circle “A” A

If average or moderate, circle “O” O

If high or above average, circle “D” D

6. **CRITICAL APPRAISEL & LEARNING STYLES:** As you are learning something new, do you tend to judge it critically at the time you are learning it? Or do you tend to accept it and perhaps judge it critically at a later time?

Judge it critically at the time, circle “A” A

It depends. I’ve done both at different times, circle “O” O

Accept it at the time, “circle “D” D

7. **RESPONSIBILITY:** In terms of taking responsibility for your own actions, where would you put yourself compared to most other people? Average? Above average? Below average?

If highly responsible or above average, circle “A” A

If average or moderate, circle “O” O

If low or below average, circle “D” D

Measure and Match

8. PREFERRED MODE OF CONTACT: If you are learning something new and you know in advance that you can learn it clearly, safely, and equally well by either seeing it or touching it, which would you prefer — to see it or to touch it?

- If response is see or visual, circle “A” A
- If both modes are used or valued equally, circle “O” O
- If touch, circle “D” D

9. PROCESSING: When you come up with a new idea, there will often be two parts to it: one, to dream it up, and the other, to figure out how to do it. Of these two parts, which gives you a greater sense of fulfillment?

- If implementing or carrying it out, circle “A” A
- If both are satisfying or if it varies, circle “O” O
- If response is dream or think up idea, circle “D” D

10. WRITING VALUE: As you do this work (described in the above question), is it necessary for you to write notes or do you feel your way along without writing anything down?

- If response is “must rely upon writing notes”, circle “A” A
- If response indicates minimal or small amount of writing, circle “O” O
- If response is “without taking notes”, circle “D” D

SCORE:

Count every ‘A’ as 1, every ‘O’ as 3, every ‘D’ as 5.

Apollonian = 10 Range 10 – 20

Odyssean = 30 Range 20 – 40

Dionysian = 50 Range 40 – 50

Ask the patient: “As you know yourself, how would you best describe you? Organizer, Director, Balancer, Explorer, Complier. Name your first choice, then second...”

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Virginia: Lippincott, Williams & Wilkins.

Spiegel, H. & Spiegel, D. (1978). *Trance and treatment: Clinical uses of hypnosis*. New York: Basic Books, Inc.

Spiegel H. & Spiegel D. (2004). *Trance & treatment: Clinical uses of hypnosis*. 2<sup>nd</sup> ed., Washington DC: American Psychiatric Press.