

## Clinical hypnosis and Patanjali yoga sutras

Shitika Chowdhary, Jini K. Gopinath

Department of Psychology, Christ University, Bangalore, India

### ABSTRACT

The trance states in yoga and hypnosis are associated with similar phenomena like relaxation, disinclination to talk, unreality, misrepresentation, alterations in perception, increased concentration, suspension of normal reality testing, and the temporary nature of the phenomena. While some researchers consider yoga to be a form of hypnosis, others note that there are many similarities between the trance in yoga and the hypnotic trance. The present study aimed to find similarities between the trance states of hypnosis and Patanjali's yoga sutras. The trance states were compared with the understanding of the phenomena of trance, and the therapeutic techniques and benefits of both. An understanding of the concept of trance in Patanjali's yoga sutras was gained through a thematic analysis of the book *Four Chapters on Freedom* by Swami Satyananda Saraswati. This led to an understanding of the concept of trance in the yoga sutras. The obtained concepts were compared to the concepts of trance in hypnosis (obtained through the literature on hypnosis) to investigate whether or not there exist similarities. The findings of the study show that there are similarities between the trance in hypnosis and the trance in Patanjali's yoga sutras in the induction and deepening of the trance states in hypnosis and that of Samadhi, the phenomena present in hypnosis and the kinds of siddhis that are obtained through Samadhi, and the therapeutic techniques and the therapeutic process in Patanjali's yoga sutra and hypnosis.

**Key words:** Consciousness, hypnosis, trance, yoga

### INTRODUCTION

#### Consciousness and Altered States of Consciousness

Consciousness can be defined as the subjective awareness of the momentary experience interpreted in the context of personal memory and present state.<sup>[1]</sup> Altered state of consciousness is also defined in terms of a change in the subjective experience. One popular definition is the one given by Tart in 1990. He defines the altered state of consciousness as one in which the individual feels a qualitative shift in his pattern of mental functioning; there is a change in the qualities of mental processes. It is not just defined as a quantitative shift, in terms of more or less alert, more or less visual imagery, etc.<sup>[2]</sup>

This definition highlights that primary phenomenal consciousness; which is awareness of a changed pattern of subjective experience; and reflective consciousness,

in which a cognitive judgment must be passed so as to recognize that the experience is different from normal; are both involved in the altered state of consciousness.

Altered states of consciousness or trance state have also been understood as a deviation from the normal states of consciousness. It has been understood as a state in which the world or the self tend to be misrepresented. This is caused by an internal or external change in the organism's biological makeup and it alters the representational relations and hence is not a functional, original or permanent state of the organisms' consciousness. An altered state of consciousness is thus, due to a change in the representational state of consciousness and is not restricted to any specific cognitive, affective or sensory modality, but is a combination of them, and it is a temporary phenomenon.<sup>[2]</sup>

**Address for correspondence:** Mr. Jini K. Gopinath,  
Department of Psychology, Christ University, Bangalore, India.  
E-mail: [jinikgopinath@gmail.com](mailto:jinikgopinath@gmail.com)

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According to this understanding of altered states of consciousness or trance state, hypnosis can be considered as one, because it changes the background mechanisms of consciousness, as strong and multiple changes in conscious experiences are experienced as hypnotic suggestions.

### Hypnosis through the ages

Hypnosis is derived from the Greek root *hypnos*, which means to sleep. Even the origins of the word means to sleep, hypnosis is not a state of sleeping. The trance in hypnosis resembles sleep, but this trance is different from the other states of consciousness (awake, sleep, and dream states).

Although it is Anton Mesmer, who is credited for the origin of hypnosis, it is not true.<sup>[3]</sup> Two-thousand years before Mesmer, techniques of induction were being used by ancient Egyptian and Greek priests. There is evidence of Egyptian priests performing death and rebirth rituals in what they called as “Temples of Sleep.” Drugs and psychedelics were used to assist the process. Those who lived through the experience were said to “have experienced other levels of reality while being out of the physical body.”<sup>[3]</sup> Hypnosis is as old as time and has been employed in all parts of the world in some form or the other.<sup>[4]</sup>

James Braid used the term hypnosis derived from the word *hypnos*, as he thought that hypnosis was similar to sleep. He developed the eye fixation technique of inducing relaxation and called it hypnosis. Abbe Faria, a Catholic priest, was a pioneer in the scientific study of hypnosis. It was him who stated that it was not animal magnetism that was involved in the cure, but suggestion. Later, Braid recognized that hypnosis is similar to meditation in both, the psychological and physiological aspects. He defined hypnotism as a state of focussed attention upon a single idea or mental image. In his view, since hypnosis was the state of focused attention, it was fundamentally the opposite of normal sleep. After he recognized his error (of believing that hypnosis was similar to sleep), he tried to change the name to *monoedisimo*, which means a concentration on one side. The term hypnosis, even though a misnomer, still persists.<sup>[5]</sup>

In 1854, James Esdaile, a Scottish surgeon, was working in India with the East India Company. While here, he performed hundreds of minor and major surgical procedures on Indians under Mesmeric anesthesia. His book describes hundreds of operations that he performed under this technique, including amputations of the legs, removal of tumors, and other comparable surgeries. He even noted the dwindling of surgical shock in his patients. In his book, *Hypnosis in Medicine and Surgery*, 1957, he describes that he or his assistants would induce hypnosis (mesmerized) the patients in the morning, and would leave them in a cataleptic state. He would then return later and operate. When Esdaile returned to England and shared his experiences, he was, unfortunately ridiculed and ostracized by his colleagues.<sup>[6]</sup>

The first scientific text on hypnosis, *Suggestive Therapeutics* was published in 1886 by Bernheim. Bernheim observed the work of Dr. Ambroise-Auguste Liebault, a French physician. Liebault became interested in hypnosis after reading Braid's work, but in order to avoid being discredited, he worked pro bono. Bernheim and Liebault then began to work together, treating patients.

Ernst Simmel, a German psychoanalyst began using hypnosis for the treatment of war neurosis or shell shock. He called his technique hypnoanalysis. In hypnoanalysis, hypnosis was combined with the psychodynamic techniques. During World War II Grinker and Spiegel used barbiturates to induce a state of drug hypnosis in order to bring traumatic material to the surface. Hypnosis has since been playing an important part in the treatment of combat fatigue and other neuroses. The most important development to come out of the world wars was the merger of hypnotic techniques with psychoanalysis. This development revived a great deal of interest in hypnosis and led to the publication of various books with hypnosis and suggestibility as the subject matter.<sup>[4]</sup>

Hypnosis has since been recognized as a treatment method by the American Medical Association (in 1958). There are now several journals devoted exclusively to the experimental and clinical applications of hypnosis. These include, but are not limited to The American Journal of Clinical Hypnosis, The British Journal of Medical Hypnotism, The Journal of Clinical and Experimental Hypnosis.

### Theories of hypnosis

The phenomena associated with hypnosis are explained through two main types of theories. These are referred to as state and non-state theories. A key debate in hypnosis had been between the state and non-state theorists. According to the state theorists, hypnotic inductions produce an altered state of consciousness, which is associated with an altered state of brain function. The response to suggestion is also due to special processes such as dissociation or other altered states of consciousness. The non-state theorists however, are of the view that participants respond to suggestion without hypnosis and that suggestibility can be modified by drugs and psychological procedures; and the participants in hypnosis are actively engaged to be in a trance state. They also hold the belief that responses to suggestions are a product of normal psychological processes such as attitudes, expectancies, and motivations.

Hilgard's neodissociation theory of hypnosis is a classic state theory. It proposes that hypnotic phenomena are produced through dissociation within high level control systems. This means that the hypnotic suggestion is said to split the functioning of the executive control system into different streams. Part of the executive control system functions normally, but is unable to represent itself in

conscious awareness due to the presence of an amnesic barrier. The hypnotic suggestions act on the dissociated part of the executive control system and the subject is aware of the result of the suggestion and not the process by which they came about.<sup>[7]</sup>

Neuro-physiological theories of hypnosis propose that high hypnotisable people have better executive function than low hypnotisable people. Since they have better executive functioning, they are able to deploy their attention in different ways. One model of hypnosis characterizes it as a change in brain function.<sup>[8]</sup> This neurophysiological account emphasizes that the changes in the way the attentional control system operates in hypnosis makes the subject more suggestible.

Social cognitive theory of hypnosis argues that the experience of effortlessness in hypnosis results from participant's motivated tendencies to interpret hypnotic suggestions as not requiring active planning and effort (i.e. the experience of effortlessness stems from an attributional error). The attribution of volition depends on the kind of response-set which has been put into place, and if a hypnotic response-set is in place then volition is attributed externally. This means that the effortlessness in hypnosis comes about when individuals expect things to be effortless, and "decide" (more or less consciously) to respond along with suggestions. One important factor to note when considering socio-cognitive hypnosis theories of this sort is that they do not imply that subjects are always "faking," or not really experiencing an involuntary hypnotic response. Although these models use terms such as "role enactment" or "self-presentation" they are still entirely consistent with the notion that hypnotised participants have unusual experiences.

The ecological theory of hypnosis is based on Shor's idea that the depth of hypnotic trance is related to the degree to which the participant loses awareness of the distinction between imagination and reality. This distinction is termed as the generalized reality orientation. Ego-psychological theory distinguishes between primary processes (emotional, holistic, illogical, unconscious, developmentally immature) and secondary processes (affect-free, analytical, logical, conscious, developmentally mature). Whereas normal adult functioning is biased toward secondary processing the induction of hypnosis makes the subject "let go" of some secondary process activity. Critically, this theory is not as well-specified as some other cognitive theories, and is thus not as easily testable or falsifiable.

The third way research in hypnosis understands the phenomena in hypnosis as both a state of cognitive change that involves basic mechanisms of cognition and consciousness, and as a product of social interaction as

the hypnotist and the subject come together for a specific purpose within a wider socio-cultural context.<sup>[9]</sup> The third way theories include the integrative cognitive theory which makes a distinction between being in a mental state and being aware of being in that state. An emphasis is placed on perception and consciousness. It includes the dissociated control theory concept which suggests that responses are facilitated by an inhibition of high-level attention and the response set idea that suggested that involuntariness is an attribution about the causes of behavior.<sup>[10]</sup>

### The trance in hypnosis

It is difficult to define a hypnotic trance state, but it can be inferred from hypersuggestibility, passivity, disinclination to talk, and fixed facial expressions, feelings of relaxation, unreality, automaticity and compulsion, alterations in body image, and unusual sensations have been reported to accompany hypnotic trance.<sup>[4]</sup> The hypnotic state has been described as one in which there is focused attention, concentration in which learning is maximized, alterations in self-awareness, a state of internally focused absorption and the suspension of normal reality testing, alterations in perceptions.<sup>[11-15]</sup>

The trance in hypnosis is characterized by a quiet, calm and peaceful mind. There exists a general sense of wellbeing. They describe it as a state of alert restfulness as the person is awake but the state is more like sleep than awake. The subjective time moves slowly, and the distinction between the present, past, and future is lost. There is a shift of space location and one can experience oneself at several different locations in space. The depth of trance may be mild, moderate, or intense in depth.<sup>[6]</sup>

Initially, the pulse rate and blood pressure rise, but they soon go below the resting levels. The respiratory rate also first rises and then falls below the resting level. The metabolic rate falls steeply and it may fall below the level of sleep. The body and face seem flushed as the peripheral flow of blood increases. There is also a decline in the plasma cortisol levels and there is increased functioning in both the hemispheres of the brain.<sup>[4,6]</sup>

Lethargy is present in a light hypnosis state. It is characteristic in this state that muscles contract at the slightest touch, friction, pressure, or massage. This contraction can be restricted, by the by, the repetition of the stimuli that caused it. In this state of light trance, the subject appears to be in deep sleep, the eyes are closed or half closed and the face is expressionless. The body appears to be in a state of complete collapse with the head thrown back, and the arms and legs hang loose, dropping heavily down.<sup>[4,6]</sup>

Catalepsy characterizes a deeper level of trance and in this the subject becomes rigidly fixed in the position in which they were in while they were entering catalepsy. Whether

it is standing, or sitting, or kneeling. Arms or legs can be raised and will remain in that position.

Since a trance state is also described as one in which there is a “heightened focus of attention or concentration on internal or external cues” one can say that hypnosis is an altered state of consciousness or a trance state.<sup>[16]</sup>

In this trance state, perception is clarified. What an individual perceives is colored by various projections of the mind. They refuse to accept perceptual clarity and the perception of reality is through these projections, in the hypnotic trance state however, reality is perceived free of the projections.

## CONSCIOUSNESS IN YOGA

Consciousness in yoga can be conceptualized as William James’ idea of consciousness. William James compared consciousness to a stream that was unbroken and continuous. This stream however, goes through constant changes and shifts and Patanjali yoga sutra states that there are seven states of consciousness or *Saptadha prantabhumih pragyana*.

These seven states are as follows:

1. Awake
2. Sleep
3. Dream
4. Turya
5. The fifth state is defined as “abiding in mere non-duality, with all distinction and division extinguished, he is seen as one asleep”
6. The sixth state is described as where he dwells “without knot,” liberated while living and without conception or ideation
7. The seventh state is the state of enlightenment, which is the state of liberation without the body.

The turya state has been described as a tranquil settlement in the state of liberation and the state of witness in action.<sup>[6]</sup> The state of turya has been explained in the Mandukya Upanishad as:

*“...that which has no parts, soundless, the incomprehensible, beyond all senses, the cessation of all phenomena, all blissful and non-dual AUM, is the Fourth, and verily it is the same as Atman. He who knows this, merges his self in the supreme self - the individual in the total.”*<sup>[6]</sup>

Since there is a distorted sense of self in this state, which is a misrepresentation, this state can be considered as an altered state of consciousness.

The altered state of consciousness or trance state of yoga is that of Samadhi. It is described by the phrase *sat-chit-ananda*, which translates to truth-consciousness-bliss. This relates to

a different realm of experience which is possible to describe only by metaphors and paradoxes.<sup>[12]</sup>

According to Patanjali yoga sutras, Samadhi is the goal of yoga. It can be defined as the pointless point of consciousness beyond which nothing else remains. It is the deepest level of consciousness where even the sense of individuality does not remain.

From the literature reviewed it can be seen that the trance states of yoga and hypnosis have certain similarities. Trance in both the states is associated with relaxation, disinclination to talk, unreality, misrepresentation, alterations in perception, increased concentration, suspension of normal reality testing, and the temporary nature of the phenomena. Yoga can be considered to be a form of hypnosis and many similarities between the trance state of hypnosis and yoga have been noted.<sup>[4,12]</sup> While yogis are credited with performing difficult tasks like walking over burning coal, or being able to lie on nails, individuals under the hypnotic trance are reported to have “heavy weights on their abdomen while lying stretched in midair with supports only at his heads or ankles.” Apart from this, not much research has been carried out, which investigates the similarities if any in the trance of yoga and hypnosis. In this study, I aim to fill this gap literature by comparing the trance state in hypnosis and yoga. Along with this I will also focus on the therapeutic techniques of yoga and hypnosis.

## Research design

In this study, whose aim is to investigate the similarities between hypnosis and yoga in terms of the altered states of consciousness, regression and therapeutic value, a qualitative design is used.

A qualitative study is one that provides an in-depth understanding and interpretation of phenomena by learning about the social and material circumstances, and histories.<sup>[17]</sup> A qualitative design is suited for this study as it helps to investigate whether or not there are similarities between the trance states of yoga and that of hypnosis. The qualitative methodology also helps to explore the historical, philosophical, and scientific roots of yoga and hypnosis and the conceptualization of the trance states in them. The study uses a pragmatic approach as methods and procedures that work best for answering the research question have been employed.

## Research questions

Broad Research Question: To investigate the similarities between yoga and hypnosis.

Specific Research Question: To investigate the similarities between Patanjali yoga sutras and hypnosis in terms of the altered states of consciousness, and their therapeutic value.

### Sample

The sample consists of a text on Patanjali yoga sutra: *Four Chapters on Freedom: A Commentary on the Yoga Sutras of Patanjali*, by Swami Satyananda. The book is published by the Bihar School of Yoga, which is the world's first yoga university. The Bihar School of Yoga was founded by Swami Satyananda Saraswati in the year 1964. The book, *Four Chapters on Freedom* is a text used for the courses in the university, and is a widely accepted text on Patanjali yoga sutras. This is the reason this text is selected for analysis.

### Data collection

The following serve as data for the study:

1. The text on Patanjali yoga sutra. (*Four Chapters on Freedom: A Commentary on the Yoga Sutras of Patanjali* by Swami Satyananda Saraswati)
2. Discussion of findings with expert: Findings obtained from the thematic analysis are communicated to an expert and discussed with her. This discussion provides insights, which are incorporated into the study.

The study is conducted in two phases. In the first phase, analysis of the book *Four Chapters on Freedom: A Commentary on the Yoga Sutras of Patanjali* by Swami Satyananda Saraswati is carried out. In the second phase, the concepts obtained through the analysis are compared to the concepts of hypnosis to uncover the similarities between the two.

### Data analysis

Thematic analysis is the method of analysis for the first phase of the study. Thematic analysis is defined as a general method of analysis of text. It is a method for "identifying, analyzing and reporting patterns within data." There are six steps in the through which thematic analysis progresses.<sup>[18]</sup> In the first phase the familiarization with the data is achieved, followed by generation of initial codes, following, which there is the search for themes, which are then reviewed, defined and named and then the report is written.

Following the same process, in the first phase *Four Chapters on Freedom: A Commentary on the Yoga Sutras of Patanjali*, is read to become familiar with the text. This is followed by an initial coding which leads to the formation of themes. The themes are then reviewed and then defined and named. Through this process meaning units are created, which describe and explain each of the phenomena under study. These are then used to form themes, which illustrate each of the phenomena.

In the second phase of the study, the themes generated through the thematic analysis of the text are compared with the concepts in hypnosis to investigate whether or not there are similarities between the phenomena in Patanjali yoga sutras and phenomena in hypnosis.

### Issues of trustworthiness and process of validation

- The themes obtained from the analysis were finalized

after discussion with a student pursuing her Masters in Psychological Research Methodology who went through relevant passages from the text independently

- The findings were discussed with the supervisor and an expert in the field of yoga which provided further insight. This served as a method of triangulation
- Peer debriefing: A competent peer was given regular progress reports of the research
- A paper trail of the documents used for analysis, and the different stages of analysis is maintained and is available on request.

### ANALYSIS OF RESULTS AND DISCUSSION

The text which was analyzed, *Four Chapters on Freedom: Commentary on the Yoga Sutras of Patanjali* by Swami Satyananda Sarswati was published in 1976. This book is a commentary on the yoga sutras written by the sage Patanjali. Sutra means thread and it is implied, by the use of this word, that the written verses carry and underlying, continuous and unbroken thought. The various ideas in the sutras connect with each other and one thought leads to the next resulting in a complete philosophy.

The yoga sutras of Patanjali consist of 196 sutras, which are organized into four chapters. These are:

- Samadhi Pada: This consists of 51 verses and is the chapter on Samadhi.
- Sadhana Pada: This consists of 55 verses and is the chapter on practice.
- Vibhooti Pada: This chapter discusses various psychic powers and consists of 56 verses.
- Kaivalya Pada: It the chapter on isolation or aloneness. It consists of 34 verses.

From the thematic analysis, it was found that there are similarities between the trance state in hypnosis and yoga. These similarities are found in terms of:

- The induction and deepening of the trance states in hypnosis and that of Samadhi
- The phenomena present in hypnosis and the siddhis obtained through Samadhi
- The therapeutic techniques and the therapeutic process in Patanjali's yoga sutra and hypnosis.

Along with the similarities between the two, there were many ideas in Patanjali yoga sutras which were found to be similar to psychological concepts.

### Psychological concepts in Patanjali yoga sutras

There are many ideas in Patanjali yoga sutras that are parallel to and resemble concepts that are present in psychology. The mind or chitta as described in Patanjali yoga sutras is said to be comprised of the conscious, subconscious and the unconscious. Patanjali yoga sutras also believe that self-realization can take place only when the chitta vrittis cease their activity or when the chitta is no longer affected

by the three gunas. Only when there is a cessation of identification with the outside objective world, the mind is able to see things as they are. This is similar to the idea in psychology of the presence of schemas through which we make sense of the world. Schemas can be conceptualized as organized patterns of thought and behaviors or structures that organize our knowledge and assumptions about something that is used for interpreting and processing information. They influence our attention to a situation and also influence what we look for in situations. It is the schemas that guide our thinking and information processing. All the information that is received from the external world is interpreted through the schemas we hold.<sup>[19]</sup> In order to gain an objective understanding, one must look at this information outside of the schemas. This is essentially the same idea that is present in Patanjali yoga sutras as well. The mind, Patanjali explains, is colored and conditioned by its likes, dislikes, and false beliefs. It further explains that the external reality is superimposed with the modifications of the mind. This can result in misidentification leading to feelings of joy, sadness, fear, like, dislike, etc., Suffering is a result of the identification of the modification of the mind with the external object. In order to overcome suffering this association has to be broken.

Patanjali yoga sutras also hold that memory is made up of past impressions. Smriti, it describes as an independent awareness on which impressions are embedded. It also believes that even if the past clears up, the smriti remains. Thus we see that smriti is analogous to schemas as schemas too, are mental structures that help us organize information regarding the external world. They are cognitive representations of the self which guide the kind of attention paid to external events and the meaning that they convey.<sup>[19]</sup>

The modifications of the mind, according to the yoga sutras are of five kinds (depending on the sense that is responsible for the perception) and are either painful or pleasurable (there is a liking of the pleasurable and a disliking of the painful). This holds that an object or event in itself is not painful or pleasurable, but it is the mind that makes it so. It is the attachment that one has toward objects that causes attraction and repulsion toward them. Abandonment of this attachment or the process of detachment gives rise to freedom from this attraction or repulsion, thereby helping in controlling the pleasure and pain one experiences. This is the same as the concept of cognitive theory and cognitive hypnotherapy. Cognitive theory posits that people tend to perceive and interpret situations in characteristic ways that color their feelings and shape their behaviors. People often have spontaneous, automatic thoughts about their past, current or future situations. People are not conscious of the automatic thoughts but of the emotions arising from them. These arise from the beliefs and ideas that are embedded in the mental structures of the mind. These

are called schemas. These schemas have the ability to bias processing of information and external events are colored by the schemas which guide the individual. This makes the individual infer an external event as positive or negative, pleasurable, or painful.<sup>[20]</sup>

The yoga sutras also explain the yogic theory of perception. This holds that even though the object is one, it is perceived differently at different times and by different people depending on the difference in mental conditions. It is this difference in perception that makes object capable of inducing pleasure and pain and suffering. Once the perception is cleansed of one's mental modifications external events fail to evoke pain and suffering in the individual. This is similar to the principle of cognitive behavior therapy.<sup>[20]</sup>

The yoga sutras also hold the concept of conscious and subconscious memory. Conscious memory involves the recollection of things already experienced. This is different from subconscious memory that refers to the memory that one does not consciously remember. This may present itself in dreams and the memories that are revealed there are memories of actual events that are not distorted. The sutras thus, are of the opinion that conscious memories are distorted due to our impressions are remembered as such and not as what the reality was. This is in line with the idea of memory being a reconstructive process.<sup>[21]</sup>

The yoga sutras also discuss pain and its cause. They explain that pain is not in the present but is rooted in the past. Klesha is the agony that is present in our very being. According to them, everyone feels pain but everyone is not aware of it. Pain is thought to be at the bottom of everything and Patanjali also talks of three different types of pain.

- The first pain is change, life changes to death
- The second is acute anxiety, achievement, success and love give rise to anxiety at some time or the other;
- The third pain is habit, we become used to things and are then afraid of losing them.

### Similarities in the induction and deepening of trance in hypnosis and Patanjali yoga sutras

The process of attaining the trance state in hypnosis is referred to as the induction process. One of them is the eye fixation method. In the eye, fixation method is a type of hypnotic induction method that people associate most with hypnosis. In this method, the client is instructed to maintain a fixed gaze on an object. This could be any object, a spot on the wall, the hand of the hypnotist, a finger held in front of the client's eyes, or even, the flame of a lamp.<sup>[22]</sup> This method is similar to the technique described in the yoga sutras, wherein the aspirant concentrates on an object, internal or external, which could be the image of a deity, a flame, the tip of the nose or even concentrating between the eyebrows to attain Samadhi.

### Similarities in the phenomena of trance in hypnosis and Patanjali yoga sutras

In the trance of hypnosis, there is a shift in the perception of the external world and the internal environment.<sup>[11]</sup> Some of these changes can be compared to the siddhis described in the Patanjali yoga sutras. Subjective time appears to move slowly and an hour may appear to have been only a few minutes. Memories of remote events of the past are recalled with uncanny accuracy. During hypnosis, the power of selected groups of muscles can be increased, which is the same as the attainment of strength. This increase in strength can be maintained after the trance state through the use of post-hypnotic suggestion. The body temperature can be made to increase in the trance of hypnosis; this is found in the yoga sutras as well. The action of the organs can be changed, and this is a siddhi too. Hearing is said, can be made more acute in the trance of hypnosis, this is analogous to the siddhi of divine hearing.<sup>[11]</sup> Thus we see that there are indeed similarities in the phenomena of hypnosis with the siddhis described in the Patanjali yoga sutras.

### Similarities in the therapeutic process and techniques in hypnosis and Patanjali yoga sutras

Hypnosis and hypnotherapy is a paradigmatic phenomenon. It challenges fundamental assumptions of self and reality. An individual's perceptions and beliefs can be overturned through hypnosis and hypnotherapy. Hypnotherapy also believes that schemas or cognitive structures regulate psychological functioning or adaptation and give meaning to contextual relationships. Assignment of meaning at the conscious and unconscious level activates behavioral, emotional, and other strategies of adaptation. One of the essential axioms of hypnotherapy is that meanings do not always represent reality but are a construction of a given context or goal and are subject to cognitive distortions. Some individuals are vulnerable to cognitive distortions.<sup>[23]</sup> This is the same as the mental modifications that influence the perception of reality as explained by the yoga sutras; and the techniques of Patanjali yoga sutra and hypnosis allow access to processes below the threshold of awareness, which helps in the restricting of non-conscious cognitions.

Like the techniques described in the yoga sutras for therapeutic benefits, hypnosis too induces relaxation, which is effective in reducing anxiety. It also promotes ego strengthening through the repetition of positive suggestions to oneself that get embedded in the unconscious mind. These then exert an automatic influence on feelings, thoughts, and behaviors. This enhances one's self-confidence and self-worth.

Hypnosis and the techniques of yoga sutras facilitate divergent thinking, it maximizes awareness among several levels of brain functioning. They both have a direct impact on focus of attention and concentration.<sup>[24]</sup> They also help

in directing attention to wider experiences such as feelings of warmth, feeling happy, feeling of contentment, and general feeling of wellbeing.<sup>[23]</sup> They serve to expand these experiences in the present, past, and future. These facilitate in the reconstruction of dysfunctional realities.

Even though modern psychotherapy adopts a curative paradigm and the yoga sutras of Patanjali operates through a preventive paradigm, there are similarities in the therapeutic techniques, and the therapeutic gain obtained from hypnosis and Patanjali yoga sutras. Since it has already been pointed out that ancient Indian paradigm of consciousness is holistic and is related to mental health, the trance in yoga can be used in modern psychotherapeutic processes.<sup>[25]</sup>

The above discussion highlights there are indeed hypnotic similarities in yoga with regard to the conceptualization of consciousness and altered state of consciousness, the phenomena in the altered states of consciousness and the therapeutic benefits and the therapy process.

In India, the therapeutic process is closely linked to faith and hence it make sense to make use of the traditional therapeutic modalities in modern therapeutic paradigm.<sup>[26]</sup>

### SUMMARY AND CONCLUSIONS

The trance states in yoga and hypnosis are associated with relaxation, disinclination to talk, unreality, misrepresentation, alterations in perception, increased concentration, suspension of normal reality testing, and the temporary nature of the phenomena. Yoga can be considered as a form of hypnosis and similarities between the trance of hypnosis and yoga has been noted.<sup>[4,12]</sup> While yogis are credited with performing difficult tasks like walking over burning coal, or being able to lie on nails, individuals under the hypnotic trance are reported to have "heavy weights on their abdomen while lying stretched in midair with supports only at his heads or ankles."

This study aimed to find similarities between the trance states of hypnosis and Patanjali yoga sutras. The trance states were compared on the understanding of the phenomena of trance, the phenomena of trance, and the therapeutic techniques and benefits of both. The study was conducted in two phases. The first phase of the study dealt with gaining an understanding of the concept of trance in Patanjali yoga sutras, through a thematic analysis of the book *Four Chapters on Freedom: A Commentary on the Yoga Sutra of Patanjali* by Swami Satyananda Saraswati. The thematic analysis of the book led to an understanding of the concept of trance in the yoga sutras. In the second phase of the study, these concepts were compared to the concepts of trance in hypnosis (obtained through the literature on hypnosis) to investigate whether or not there exist similarities.

The findings of the study show that there are similarities between the trance in hypnosis and the trance in Patanjali yoga sutras. These similarities are present in the following areas:

- The induction and deepening of the trance states in hypnosis and that of Samadhi
- The phenomena present in hypnosis and the kinds of siddhis that are obtained through Samadhi
- The therapeutic techniques and the therapeutic process in Patanjali yoga sutra and hypnosis.

These findings show that there are similarities in the two states and it needs to be explored further to incorporate the concepts of yoga in the modern therapeutic domain. These concepts can be used not only as preventative measures but as curative measures too.

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