

**A COMPARATIVE STUDY OF THE SUBJECTIVE EXPERIENCES OF
HYPNOSIS AND MEDITATION AMONGST A STUDENT SAMPLE**

by

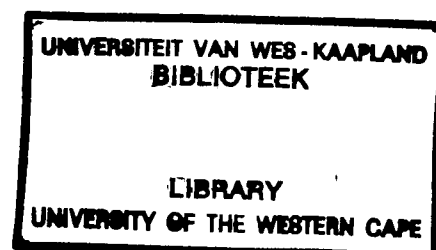
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ABSTRACT

This study reports on the nature of subjective experiences of hypnosis and meditation in a sample of volunteer University of the Western Cape students (N = 12). Historical developments in the field of psychology dictated that much of the research conducted during the past three decades into the phenomena of hypnosis and meditation, was concerned with physiological changes. The measurement of physiological responses is more amenable to scientific investigation, in comparison to the measurement of subjective experiences. As a result investigations into the nature of subjective experiences during hypnosis and meditation, as well as comparisons between the two, remain areas where continued research is encouraged.

The present study was undertaken with university post-graduate students who had minimal or no experience of meditation and hypnosis. These subjects from here on will be referred to as "naive" students. The aim of the study was to compare the subjective experiences of naive students undergoing hypnosis and meditation, and to determine whether there were similarities and/or differences in their reported experiences of these two states. The results derived from this comparison were in turn compared with what has been documented in the literature. A review of the literature elicited a host of theoretical variables which described the subjective experiences of subjects in both states. The empirical part of the study included a quantitative phase and a qualitative phase.

The quantitative phase sought to examine differences between hypnosis and meditation with the use of the Altered States of Consciousness Inventory (ASCI). Given, that to the knowledge of this researcher, the Altered States of Consciousness Inventory lacks prior validation criteria, a validation process was undertaken. The validation process consisted of a conceptual factor analysis where all 135 items in the scale were examined and classified according to the variables they were considered to measure. From this analysis 21 conceptual factors were identified. From these 21, eight variables were statistically factor analysed, resulting in the emergence of two broad factors. With these two factors it was possible to test differences across both conditions of hypnosis and meditation. This was done by employing the t-test for single samples.

The qualitative phase sought to elicit subjective experiences from the subjects with the use of the Group Hypnosis and Meditation Questionnaire (GHMQ). The GHMQ is an instrument which was designed during the study specifically to probe **subjective** experience and to provide qualitative data. After the protocols had been subjected to a content analysis, the results were analysed in order to monitor similarities and differences between the two states of hypnosis and meditation.

A critical synthesis of the quantitative and qualitative phases indicated that subjects experienced more similarities between the states of hypnosis and meditation than differences. Eight variables were found to coincide with those which have been previously identified in the literature. Variables identified in the literature are derived from both theoretical debate which is grounded in the clinical setting, and from scientific research. Finally, the study showed that the Altered States of Consciousness Inventory may be used effectively as an instrument with which variables describing subjective experiences may be identified. In conclusion, limitations are discussed, and recommendations are made for future research where this instrument (ASCI), or other similar instruments may be employed.

CHAPTER ONE

INTRODUCTION

Hypnosis and meditation are altered states of consciousness which are both commonly induced by specialists and lay people alike. Hypnosis is widely used within the field of clinical psychology both as a mode of psychotherapy (Scott, 1993), and as a technique which can be self induced. It is also commonly used in dentistry as a means of anesthesia (Hartland, 1982). Meditation is widely practiced within the Buddhist tradition as a core means of facilitating self-healing and insight (David-Neel, 1977). The two phenomena are used within contemporary western society as methods of healing, yet both practices have differing historical and geographical origins. Both techniques are described in the contemporary literature. However, it appears that the literature in respect of hypnosis is largely confined to medical, psychiatric and psychological texts and articles, with increasing attention being devoted to hypnosis in "popular magazines", whereas meditation is discussed in specific psychology texts and articles, or in literature devoted to the Buddhist tradition. Hence, perusal of the contemporary literature may lead lay people into perceiving that the two phenomena are as divergent as the texts in which they are described. Furthermore, it is apparent that research in the area of the interface between hypnosis and meditation is scant; texts devoted to both states are readily available, however there is an apparent lack of research devoted to understanding the relationship that exists between these two altered states of consciousness.

The present study was undertaken to compare the subjective experiences of university post-graduate students undergoing hypnosis and meditation, and to determine whether there are similarities and/or differences in their reported experiences of these two states. The subjects had minimal or no prior experience of hypnosis and meditation and will from here on be referred to as "naive" subjects. This comparison of the two states is examined in relation to what has been documented in the literature. In this study subjects were exposed to both conditions, that is, hypnosis and meditation. This is in contradistinction to other research where separate groups have been

exposed to the conditions of hypnosis and meditation respectively (Barmark & Gaunitz, 1979; Berry, 1982).

Owing to the historical emphasis of research on physiological experiences, subjective experiences during hypnosis and meditation have received less exposure to research (Berry, 1982; Epstein & Lieff, cited in Wilber, Engler & Brown, 1986). Although it has been established that there are similarities between the physiological changes which occur during hypnosis and meditation, there is less evidence to suggest that this is the case in regard to the subjective experiences. As the discipline of psychology continues to gain status as a respected scientific area of study, there will be less focus on research into quantifiable phenomena such as physiological change. This will open important avenues such as developing an in-depth understanding of the subjective experiences during altered states such as hypnosis and meditation.

The sample in this study is comprised of naive subjects at the University of the Western Cape campus. While acknowledging the limitations involved with employing a student sample during the course of an academic year, the researcher believes that this approach offers specific insights into research in this area. This will be elaborated upon in the latter part of the study.

In Chapter Two attention will be given to several issues including the concept of altered states of consciousness, issues relevant to the history of hypnosis and meditation, descriptive variables used to delineate the experiences of hypnosis and meditation, and some descriptive similarities and differences as outlined in the literature. These topics are summarised in tabular form.

Chapter Three focuses on the empirical research, including an outline of the research problems and goals. The research methodology and design which were chosen are discussed. The design includes the collection of both quantitative and qualitative data through the use of two scales namely, the Altered States of Consciousness Inventory (ASCI), and the Group Hypnosis and Meditation Questionnaire (GHMQ).

The results were derived through statistical analysis and phenomenological content analysis respectively.

In Chapter Four the results of the ASCI analysis in the context of the literature review are presented. In addition the results of the GHMQ qualitative analysis, and the results yielded in terms of similarities and differences are presented.

In Chapter Five, the results are discussed in the context of the interface between the two scales, and between the two scales and the literature. Practical problems are also discussed. Finally, in Chapter Six conclusions are drawn, limitations are discussed, and recommendations for future research are made.

CHAPTER TWO

REVIEW OF THE LITERATURE

This chapter will review literature relevant to the concepts of hypnosis and meditation as altered states of consciousness. Subjective experiences of these two states will be a focus. The literature concerning the interface between the physiological and subjective experiences of these two states, will be considered. The various terms used in the literature to describe subjective experiences of hypnosis and meditation will be examined, and a comparison will be made between these terms, or variables, used to describe hypnosis and those used to describe meditation. Definitions and historical data will be reviewed within the narrow context of reported subjective experiences of hypnosis and meditation. The literature review was drawn from several data bases including ERIC, MEDLINE and PSYCHABS.

2.1 INTRODUCTION

The theory and practice of clinical psychology are concerned with the investigation and treatment of various mental and emotional states. Within the field of clinical psychology there also appears to be significant interest in the various "states of consciousness" that are reported from the clinical setting as well as from within the more academic and theoretical settings. Such states include dream states, waking states, sleep states, psychotic states, hypnogogic and hypnopompic states, meditative states, contemplative states, hypnotic states and a host of other states of being. It is beyond the scope of this study to launch into a full discussion of the "state debate" (Coe, 1992; Kirsch, 1992). It is relevant to note, however, that terms such as "altered state" or "altered state of consciousness" are subject to bitter debate in the literature. In the context of this study, these terms will be used to describe specific states of consciousness that differ from the usual states of consciousness (Pratt, Wood & Alman, 1988; Tart, 1972).

The occurrence of various states of consciousness has become a major area of interest for researchers and lay people (Berry, 1982). Despite the growing interest in this area of psychological research, there remains considerable controversy surrounding the existence or non existence of various "altered" or alternative forms or states of consciousness (Kirsch, 1992).

That the waking state of being is qualitatively different from a state of sleep or any of the states mentioned above has been well established (Berry, 1982; Tart, 1969). There is, however, less clarity on how these states differ from each other.

The question of the *quality* of subjective experiences becomes relevant if research is to answer questions surrounding the nature of states of mind and how they differ from one another. In the 1960's Stanislov Grof conducted research with LSD psychotherapy and concluded that his subjects transcended the psychodynamic level and entered the transpersonal realm (Walsh & Vaughan, 1980). According to Walsh and Vaughan (1980), one has the potential to reach this state of consciousness without chemical substances through processes such as meditation, yoga and advanced psychotherapy. It appears that this potential can also be reached through hypnosis, which is reported to be qualitatively different to the waking state (Hall, 1989; Scott, 1993).

The history of research into altered states of consciousness shows that the focus was not always on such subjective experiences. During the last two decades much of the research which focused on the relationship between such altered states of consciousness, concerned the measurement of objective physiological responses of subjects undergoing either hypnosis, meditation or both (Paul, 1969; Wallace, 1970; Walrath & Hamilton, 1975). Research into physiological responses of subjects during hypnosis and meditation provided researchers with exact scientific data concerning physical responses during these altered states of consciousness. This research left many questions unanswered, however, specifically with regard to the nature of subjective experiences.

Such research was taken a step further by Berry (1982) who addressed the issue of change in subjective experience. He demonstrated a move away from preoccupation with the detection of physiological responses. Berry researched whether or not a self-report inventory of subjective change in experience could be used to discriminate between subjects in different altered states of consciousness.

It appears then that during the past 30 years research in the area of hypnosis and meditation has focused, among other issues, on the three following areas:

- hypnosis and meditation as altered states of consciousness,
- physiological changes which occur during altered states of consciousness such as hypnosis and meditation,
- subjective experiences during states such as hypnosis and meditation.

2.2 ALTERED STATES OF CONSCIOUSNESS

One of the most comprehensive approaches to explaining the phenomena of hypnosis and meditation is to include them in the paradigm of altered states of consciousness (Pratt, Wood & Alman, 1988). This is a broad conceptual area but will be explored as the basis underlying the subjective experiences of states such as hypnosis and meditation.

2.2.1 Definition

Altered states of consciousness (ASCs), as polymorphous phenomena, remain surrounded by considerable controversy. Human beings appear to conduct their everyday activities within a state of awareness or a state of consciousness which can be understood as a distinct physiological and psychological condition of awareness (Pratt et al., 1988). Pratt et al. (1988) hold the view that different states of consciousness are not discrete, but are located on a continuum stretching from alert waking to deep dreaming. Charles Tart (1937, 1970), a pioneer in the area of state theory, identified what he termed the usual state of consciousness. According to his theory, a usual state of consciousness can be understood as any state that is experienced regularly, including sleep, waking and dreaming (Tart, 1937). According to the view of Pratt et al. (1988) any state that is qualitatively different from a usual state of consciousness can be broadly defined as an altered state of consciousness. They agree that several states are associated with the term altered states of consciousness. Both hypnotic states and meditative states are among these.

2.2.2 Hypnosis and Meditation as Altered States of Consciousness

It is evident in the literature (Kroger, 1977; Pratt et al., 1988; Tart, 1937, 1970) that debate and research surrounding hypnosis and meditation would be incomplete without a concurrent exploration of the concept altered states of consciousness. Pratt et al. (1988), suggest that altered states of

consciousness are achieved through the induction of hypnosis or meditation, and furthermore that to consider the states of hypnosis and meditation separately from altered state theory would be to dismiss the foundation of the two states. Hence, there exists a mutually reciprocal relationship between hypnosis and meditation, and altered states of consciousness. The induction of hypnosis and meditation give rise to an altered state of consciousness, and equally the states of hypnosis and meditation are regarded as altered forms of the usual state of consciousness.

Historically, the interface between these altered states of consciousness and usual states of consciousness, has fascinated human beings for centuries (Tart, 1937). People have been aware of the phenomenon of hypnosis at least since the mid eighteenth century and certain groups and nations have been meditating for several thousand years (Naranjo & Ornstein, 1972).

2.3 HYPNOSIS

2.3.1. History of hypnosis

The history of modern western hypnosis dates back to 1765 when Franz Mesmer expressed his beliefs in the existence of a magnetic fluid in which all human bodies were immersed. He began treating patients with the use of magnets and had astounding results with patients suffering from a variety of conditions including toothache and depression (Hartland, 1982). At this stage of its development hypnosis was very much in its infancy and hardly acknowledged within scientific circles. The major shift in the status of hypnosis from the unknown to a more acceptable psychological construct came with the contributions of J.M. Charcot (Craslineck & Hall, 1975). His authority did much to make investigation in this field respectable (Craslineck & Hall, 1975). Freud, together with his colleague Breuer, developed an interest in hypnosis. The former later rejected hypnosis when he felt that the system of psychoanalysis was superior to hypnosis (Kline, 1972). According to Glasner (1955), Freud's rejection of hypnosis, after his earlier enthusiasm, had a profoundly negative effect on the development of the field. Following Charcot's death in 1893, the scientific study of hypnosis declined and remained dormant until World War One, when interest in this technique was revived as a means of treating post traumatic war neurosis (Craslineck & Hall, 1975). Although hypnosis has its origins in the eighteenth century, it is only

since the 1960s that researchers have focused on understanding the physiological and subjective experiences resulting from this phenomenon.

2.3.2 Physiological changes during hypnosis

Although the focus of this study is on the subjective experiences during the states of hypnosis and meditation, any review of the literature would be incomplete without mention of research addressing physiological changes during hypnosis.

Prior to the development of interest in subjective changes during hypnosis, much of the research aimed at explaining altered states of consciousness in objective terms. It did so by means of measuring the objective physiological responses thought to be associated with hypnosis. These studies focused on the measurement of physiological responses for two primary reasons. First, measurement of physiological responses provided hard evidence in a field which was filled with speculation and skepticism. Secondly, at that time there were no other objective mechanisms available with which to measure or explain altered states of consciousness (Berry, 1982).

Physiological responses which were subjected to scrutiny included heart rate, respiration rate, galvanic skin response, and electroencephalograph readings. Reviews of these studies may be found in the articles of Davidson and Goleman (1977), Paul (1969), and Walrath and Hamilton (1975). Whereas the above studies focused on physiological responses such as galvanic skin response and heart rate, Morgan, Mac Donald and Mac Donald (1974) paid attention to EEG alpha waves. They correlated alpha waves with laterality of eye movement and reported that laterality of eye movement, specifically left-eye movement was associated with hypnotic susceptibility. Walrath and Hamilton (1975) addressed the question of physiological changes by exploring whether or not hypnosis and meditation could be discriminated from each other on the basis of three common physiological measures. They compared heart rate, respiration rate and galvanic skin response (GSR) in response to the procedures of meditation, self-hypnosis and instructed relaxation respectively. They found that while all three factors (heart rate, respiration rate and GSR) were significantly affected by the experimental procedures, there was no difference between the experimental groups on the physiological measures. Paul (1969) conducted a similar study but concerned himself with the effects of hypnotic suggestion and brief relaxation

training on subjective tension and physiological arousal (heart rate, respiratory rate, tonic muscle tension and skin conductance). He concluded that both experimental procedures produced significantly greater effects than controls.

2.3.3 The subjective experience of hypnosis

The studies which examined physiological responses to hypnosis were clearly scientific in that they made use of experimental designs and involved objective measurement of observable phenomena. The measurement of subjective experiences is, however, in contradistinction, a less clearly defined task.

2.3.3.1 *Definition and descriptors*

In spite of the many definitions and formulations of the subjective experience of hypnosis, the concept of hypnosis remains enigmatic in nature. Pratt et al., (1988) offer the following comment:

Hypnosis has always been an enigma. The more it is subjected to the light of modern empirical scrutiny, the more it eludes definition. Like the blind men in the fable who attempt to describe an elephant, researchers know a great deal about hypnosis but remain unable to fit the parts into a single conceptual whole (p.2).

In venturing a simple definition of hypnosis, Hartland (1982) makes clear connections between the hypnotic state and the unconscious part of the mind. According to Hartland:

Hypnosis is essentially a particular state of mind which is usually induced in one person by another. It is a state of mind in which suggestions are not only more readily accepted than in the waking state, but are also acted upon much more powerfully than would be possible under normal circumstances. Hence, the hypnotic state is always accompanied by an increase in the suggestibility of the subject. ...That suggestions should be accepted and acted upon more readily in the hypnotic state than in the waking state, can be linked to the following simple fact: in the hypnotic state, the power of criticism is either fully or partially suppressed (Hartland, 1982, p.13).