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THE VALIDITY OF SUGGESTIBILITY AS A DEFINING
FEATURE OF THE HYSTERICAL PERSONALITY

A Thesis

by

DAROLYN HILTS
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Submitted to the Graduate School
Appalachian State University
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July 1984

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ABSTRACT

THE VALIDITY OF SUGGESTIBILITY AS A DEFINING FEATURE
OF THE HYSTERICAL PERSONALITY. (July 1984)

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The present work investigated the validity of suggestibility as a core characteristic of the hysterical personality pattern. While some investigators indicated that there was little systematic relationship between personality factors and suggestibility, clinical literature indicated that increased suggestibility would be seen in hysterical people. This notion was tested through the utilization of an experimental design in which both primary and secondary suggestibility were examined. Before the experiment proper commenced, 78 college women were preselected and classified on hysterical trait level through a questionnaire measure. Subjects both high and low on hysterical traits were then randomly assigned to one of three treatment conditions. Run in groups, all subjects were administered a task designed to measure primary suggestibility. The

independent variable manipulated was subject expectancy of being able to perform well on the task, accomplished through the use of a suggestion of the secondary type. Subjects were led to have either high, neutral, or low expectancies for success on the task, depending upon treatment condition. A self-rating form served as the dependent measure, and was administered immediately following presentation of the experimental task. In addition, personal data were collected on each subject on a number of variables. As hypothesized, results indicated a significant main effect for trait level. High hysterical subjects were found to be more suggestible across all treatment conditions than those low on hysterical traits. Contrary to prediction, no significant effect was found for treatment condition, indicating that expectancy for success was not influential upon subject performance. The personal data revealed differences between high and low hysterical subjects on such variables as age, academic achievement, extracurricular activities, and choice of academic major. The present findings support other empirical research in the definition of a central core of traits for the hysterical personality pattern. In addition, examination of the personal data supports clinical notions on the opposing preferences of obsessive and hysterical people. This study raises some questions as to the nature of

the relationship between primary and secondary suggestibility, as well as on the relative importance of demand characteristics and expectancy in suggestibility tasks. Specific suggestions were made for future research in several areas.

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INTRODUCTION

Since the 19th century, the hysterical personality has been the topic of many clinical inquiries and theoretical discussions. The hysterical personality has assumed an important place in the literature of psychiatry and clinical psychology. Although this personality type has been accepted as a construct for well over 100 years, there still has not been a great deal of certainty on some of the specific features that define this particular personality disorder. As a whole, the literature in this area has been rather sparse, and there are inconsistencies in the few works that do exist.

Some of the confusion surrounding this topic is undoubtedly due to the failure of writers to draw clear distinctions until fairly recently between the terms hysteria, hysterical conversion, and the hysterical personality. Much of the literature on this topic has been open to question because it is based either upon clinical description or a small number of case histories (Pollack, 1981). Empirical validation of the traits said to define the hysterical personality has been virtually nonexistent.

Although there has been a moderate amount of agreement among clinicians as to the defining traits of the hysterical personality pattern, one point of particular disparity has been the place of suggestibility as a defining characteristic of this personality type.

REVIEW OF THE LITERATURE

Hysterical Personality

Sigmund Freud began to formulate many of what would later become his theories of psychodynamics based on his work with hysterical conversion reactions. Although his primary focus was upon the dynamics of physical conversion reactions, he mentioned that these reactions tended to occur in those persons exhibiting a certain "pre-morbid" personality pattern. The pattern defined by Freud included traits of emotional lability, strong mechanisms of repression (especially of sexual content), and strong suggestibility. According to Freud, this increased suggestibility could be observed through the easy induction of hypnotic states with these patients, during which their symptoms disappeared. Development of this particular personality disorder was thought by Freud to originate from early childhood traumas, in which the child learned repression as a coping mechanism for emotionally-laden experiences.

Following Freud's psychodynamic framework, writers in the early 20th century largely accepted the assumption that these personality traits were usually a

prelude to conversion reactions and attempted to expound upon Freud's clinical descriptions using this concept. Fritz Wittels, in 1930, suggested that there was a nucleus of hysterical personality traits that usually existed for sometime prior to the formation of conversion reactions. In his writings, the hysterical personality was described as being externally oriented, so much so that the boundaries between the ego and the external world were blurred. The lack of firm boundaries served to make hysterical people highly susceptible to environmental influences. According to Wittels, this personality type grew out of a fixation at the oral stage of development (Arieti, 1974).

Wilhelm Reich, in 1933, described the premorbid hysterical personality as having the following characteristics: obvious sexual behavior and mannerisms, coquetry with sexual frigidity, vivid imagination, and strong suggestibility. According to Reich, this personality disorder had its roots in a developmental fixation that occurred at the genital stage (Arieti, 1974).

For many years, the writings of psychodynamically oriented writers such as Freud, Wittels, and Reich were accepted as standard works on the hysterical personality pattern. As a result, distinctions between hysteria, hysterical conversion, and the hysterical personality remained vague. As recently as the late

1960s, many writers failed to make clear distinctions among these terms, as there were no clear diagnostic criteria. Writers continued to focus upon the repression mechanisms at work in the premorbid hysterical personality, which led to somatization and later the dramatic conversion reactions (Stephens & Kamp, 1962). Other writers focused upon the stability of both behavioral traits of those exhibiting hysterical conversions and the incidence of such symptomatology in psychiatric populations (Perley & Guze, 1962; Guze, 1967).

Not all writers of this period accepted the assumption that the existence of hysterical personality traits was inseparable from the formation of conversion reactions. Chodoff and Lyons (1958) were among the first to challenge this notion. Their contention was that a large part of the vagueness in the literature stemmed from the failure to make systematic attempts to independently examine the two phenomena. Attempting to move away from the psychodynamic framework in diagnosing this personality disorder, they reviewed the existing literature, limiting themselves to noting only observable behaviors. Chodoff and Lyons thus identified a seven-point profile of hysterical personality traits which were defined to be vanity/egocentrism, exhibitionism/histrionics, sexual provocativeness,

frigidity, and dependency. Suggestibility as a defining trait was mentioned, but later eliminated because it was thought to be more directly related to the easy hypnotizability seen in patients showing conversion reactions than to the hysterical personality per se.

Using their seven-point profile, Chodoff and Lyons (1958) then examined the relationship between behaviors attributed to the hysterical personality and the existence of conversion reactions. They studied 17 psychiatric inpatients that had been diagnosed as having conversion reactions. Using independent raters, they found that only three of the patients met their criteria for the hysterical personality type. On the basis of these findings, they recommended that a separate category be listed for the hysterical personality in the Diagnostic and Statistical Manual of Mental Disorders (DSM).

This did not occur until 1968, when the DSM II was published and a separate category was listed for "Hysterical Personality - (Histrionic Personality Disorder)." The diagnostic criteria were essentially the same as those of Chodoff and Lyons (1958). The DSM II described the hysterical personality as a disorder characterized by excitability, overreactivity, self-dramatization, attention-seeking, immaturity, vanity, and dependence. It should be noted that

suggestibility was not listed as a characteristic of this personality pattern.

Prior to the publication of the DSM II, Chodoff and Lyons' seven-point profile was accepted as the standard for making the diagnosis of an hysterical personality. However, not all investigators accepted the assumption that suggestibility should be eliminated as a defining trait of the hysterical personality, and there is support in the literature for retaining it as a defining feature.

Following the lead of Chodoff and Lyons, a number of writers attempted to further define the hysterical personality (as a concept independent of conversion reactions), limiting themselves to observed behavioral characteristics. Lindberg and Lindegard (1963) described what they termed the "habitual hysteroid attitude" based on their clinical observations. This "attitude" was concerned with the cognitive aspects of this personality type. It was defined by the following traits: social restlessness, impulsivity, impressionability, vivid imagination, distractibility, and strong suggestibility. The type of suggestibility defined by Lindberg and Lindegard appears to be at a waking, cognitive level rather than in a hypnotic state as mentioned by earlier writers. Lindberg and Lindegard mention suggestibility in the context of

tendencies for hysterics to be strongly influenced by changes in the environment.

David Shapiro, in Neurotic Styles (1965), also described the hysterical style in terms of cognitive and experiential modes. A "style" was conceptualized as a mode of functioning in an individual that is detectable in everything he or she does. Shapiro described the cognitive style of hysterical people as highly impressionistic, immediate and global. According to him, hysterics tended to rely upon quick hunches rather than methodical thought processes. They were also described as highly suggestible and easily influenced, making them likely to quickly adopt "new fads, opinions, and excitements" (p. 114). In describing the affect of hysterical people, Shapiro shows consistent agreement with earlier writers. He described them as emotionally labile and explosive, somewhat dependent, and strongly self-centered in dealing with others. Also mentioned as personality traits were sexually seductive behaviors, naivete, and an unrealistically romantic view of the world.

A cross-cultural study conducted by Blinder (1966) examined common behavioral traits in 21 female psychiatric outpatients with diagnoses of hysterical personality, based on the standards of Chodoff and Lyons (1958). He found a number of behavioral commonalities.

As a whole, these hysterics were found to be fairly high functioning individuals, a finding in disagreement with assumptions held by many writers up to that time. Many had been successful in careers and had at one time been involved with theatrics. Blinder described them as being generally attractive and well groomed. In addition, he stated that many appeared much younger than their chronological age. They also tended to hold more liberal views than their same-age peers. Blinder described their style of cognition as highly impressionistic, with quick adaptation to those views that were currently in vogue. Further description included traits consistent with earlier writings, such as heightened emotionality, disturbances in interpersonal relationships, dependency, and an often remarkable lack of common factual knowledge.

The differences in the clinical descriptions of this personality type are difficult to evaluate for a number of reasons. Some writers, such as Chodoff and Lyons, studied this personality pattern in psychiatric outpatients. Blinder, Lindberg and Lindegard studied psychiatric outpatients, and Shapiro studied both. As a result, it is not surprising that some differences exist concerning the specific features associated with the diagnosis of the hysterical personality, especially

when the different theoretical backgrounds of the writers are taken into account.

While clinicians were debating some of the defining characteristics of the hysterical personality, a few investigators attempted to identify traits through factor analysis. Probably the most noteworthy attempts to validate an hysterical personality trait cluster can be found in the factor analytic research of O'Neill (1965) and Lazare, Klerman, and Armor (1966, 1970).

O'Neill (1965) devised a composite measure of hysterical traits based on the scales taken from several standardized psychological tests. O'Neill then administered this test battery to matched pairs of psychiatric referrals. Half of the patients referred were diagnosed as having an hysterical personality, while the other half were diagnosed as having various other psychiatric disorders. Through factor analysis, O'Neill identified six factors contributing to the discrimination of the hysterical personality pattern. The factors identified were denial, dependency, hostility, extroversion, sexual preoccupation, and suggestibility. O'Neill suggested that the increased suggestibility of hysterical people could be noted in their tendencies to be easily led and influenced by others, as well as in looking to external sources for approval and acceptance.

Lazare et al. (1966, 1970) investigated the empirical bases of three "psychoanalytic personality patterns" (i.e., oral, hysterical, and obsessional) through factor analysis. Their first study, in 1966, was conducted with a group of female psychiatric inpatients diagnosed as having either oral, hysterical, or obsessional personalities. Lazare et al. administered a 200-item self-rating form and analyzed the factor loadings for the three personality patterns. They found significant loadings for hysterics on the following characteristics: emotionality, egocentricity, sexual provocativeness, dependency, and fear of sexuality. There was a small but insignificant loading on suggestibility for the hysterical pattern. However, suggestibility did load significantly on the oral personality pattern, which the authors conceded showed a great deal of overlap with the hysterical pattern.

This study was criticized because it utilized a preselected subject group (i.e., those that had already been diagnosed as having that disorder). Lazare et al. replicated their study in 1970, using all of the female admissions to a psychiatric ward as a subject pool. Basically the same factor loadings emerged from this study as the original with regard to the hysterical pattern. Suggestibility again failed to load significantly for the hysterical pattern, but did so on the

oral personality pattern. A Dutch replication of the work of Lazare et al. reported highly similar results (van den Berg & Helstone, 1975).

It is obvious that some differences are seen when comparing the works of O'Neill and Lazare et al. It is interesting that O'Neill (1965) identified suggestibility as a factor in the hysterical personality pattern, while it failed to load significantly as a factor in the Lazare et al. (1966, 1970) studies. However, as with clinical descriptions, these different findings should be evaluated in light of the fact that O'Neill studied outpatients and Lazare et al. studied inpatients. As a result, it is not surprising that some differences were found, especially when it is considered that the assessment devices used were quite different.

It is somewhat puzzling in the Lazare et al. (1966, 1970) studies as to why suggestibility failed to load as a factor in the hysterical personality, but did so for the oral personality, in which it had not been specifically named as a defining trait. Examination of the seven items of the suggestibility scale reveals that they are worded in a manner that implies passivity as well as tendencies to be easily swayed (e.g., "Sometimes I feel as though I have no mind of my own," "It is difficult for me to stick to my opinions when

someone else insists on theirs"). Passivity is a trait that has long been associated with the oral personality (Arieti, 1974). However, the overlap of traits between oral and hysterical personality patterns seen in this study were interpreted by some Freudian writers to lend credence to the notion that hysterics were often orally fixated.

The oral versus genital fixation debate is one that has been largely abandoned by most writers except the most strictly Freudian. A larger question that has remained unanswered in the literature is related to the relative functioning of people exhibiting hysterical traits. Some viewed them as rather low functioning (Slavney, 1971, 1980; Buze, 1967; Chodoff & Lyons, 1958). It should be noted that these writers studied psychiatric inpatients. Other writers, such as Shapiro (1966), Blinder (1966), and Lindberg and Lindegard (1963), studied outpatients and viewed them as fairly high functioning among those carrying the diagnosis of a personality disorder.

Lazare (1971) attempted to reconcile those opposing viewpoints and offered an explanation in psychoanalytic terms. He suggested that a differentiation be made between "healthy" and "sick" hysterics. Healthy hysterics (genitally fixated) were able to function fairly well and were apt to be buoyant, energetic, and

ambitious. According to Lazare, this type of hysteric develops enough obsessional traits to function well and does not show the symptoms of a personality disorder. The sick (orally fixated) hysteric was said to exhibit the classic symptoms of this personality disorder, such as disturbances in interpersonal relationships and affect, immaturity, and egocentrism.

Most other writers during this period avoided Freudian interpretations of the differences between individuals classified as hysterical. Noting that the hysterical personality is a disorder that is far more frequently diagnosed in women, they concentrated instead on the social and cultural factors which might encourage women to develop the kinds of traits normally associated with the hysterical personality.

Blinder (1966) was among the first to suggest that there is a continuum of hysterical personality traits that exists in all people, but in particular for women. He attributed this sex difference to cultural learning. According to Blinder, the healthy end of this continuum represented tendencies to be outgoing, imaginative, creative, and enthusiastic. At the unhealthy end of this continuum, traits could be seen such as emotional shallowness, disturbed relationships, and explosiveness of affect. Likewise, Lerner (1965) suggested that social forces play a major role in shaping the female

child into "a feminine character style indistinguishable from the hysterical personality" (p. 278), while Halleck (1967) viewed those diagnosed as hysterical as merely exaggerating and repeatedly utilizing certain aspects of the female role as adaptive devices.

Indeed, there is evidence that a high level of hysterical traits can be seen in normal, high functioning women. In an unpublished study, O'Neill found that normal college females scoring high on a measure of hysterical traits were later found to exhibit more hysterical traits than those scoring low on the measure, based on follow-up psychiatric interviews. Despite the fact that there was wide variability on hysterical traits among these normal subjects, no significant differences were found in academic and social functioning between those classified as hysterical and nonhysterical (O'Neill & Kempler, 1969).

Other studies using normal subjects have examined the performance of those differing on hysterical trait level in experimental tasks and found results consistent with predictions made from clinical descriptions and studies of patients having the diagnosis of hysterical personality. Normals high on hysterical traits were found to be more avoidant of blatantly sexual stimuli in an experimental task than those low on such traits (O'Neill & Kempler, 1969; Jordan & Kempler,

1970). Similarly, Slavney found high correlations between variability of mood and level of hysterical traits in normal women (Slavney, Breitner, & Rabins, 1977), as well as psychiatric patients diagnosed as hysterical (Slavney & Rich, 1980). Thus, it appears that it is possible to study the hysterical personality by comparing those high and low on such traits among normal women. It also appears that cultural factors may be largely responsible for the sex difference that is seen with regard to hysterical traits, although Warner (1978) offered evidence that behaviors labeled "hysterical" in females are labeled "antisocial" in males.

In one of his more recent works, Chodoff (1974) supported the notion of a continuum of hysterical personality traits that probably exists in most, if not all women. He, like other writers, contended that a large part of this is due to socialization. Chodoff recommended in this work, that in order to become more distant from earlier Freudian connotations, the hysterical personality be recognized under the term "histrionic personality disorder."

In the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM III) (1980), the term "Hysterical Personality" was changed to "Histrionic Personality Disorder." The specific

diagnostic criteria are essentially the same as in the DSM II, and in many ways still resembles, according to some writers, what could be termed as merely an exaggeration of stereotypic feminine behavior (Zisook & Devaul, 1978; Pollack, 1981).

The DSM III is the most recent work outlining the specific features associated with the hysterical personality pattern and is the standard for clinicians in diagnoses of mental disorders. The DSM III does not include suggestibility as an identifying feature of the histrionic personality disorder, but there are indications in discussion of the associated features that suggestibility is a trait that may be seen in this personality type. The DMS III (1980) states:

Individuals with this disorder tend to be impressionable and easily influenced by others or by fads. They are apt to be overly trusting of others, suggestible, and show an initially strong positive response to any strong authority figure who they think can provide a magical solution to their problems. (p. 304)

Assessment of Hysterical Traits

Several questionnaires and scales have been devised that are assumed to measure hysterical traits and characteristics. However, there is no widely accepted measure of hysterical personality traits for clinical or research use. Many of the existing instruments lack adequate normative data and/or sufficient evidence of

reliability and validity to allow one to make an informed judgment of their value for research.

Major personality inventories such as the Sixteen Personality Factor Questionnaire, Eysenck Personality Inventory, and the Minnesota Multiphasic Personality Inventory (MMPI) do not include a measure of hysterical traits. Scale 3 of the MMPI is termed an "hysteria" scale, but research has indicated that this scale actually measures the degree of resemblance of the respondent to patients exhibiting conversion reactions, rather than to specific hysterical personality traits (Slavney & McHugh, 1975).

As previously mentioned, O'Neill (1965) devised a measure of hysterical traits based on a composite of scales taken from the MMPI, the Guilford-Zimmerman Temperament Survey (G-ZTS), the Edwards Personal Preference Scale (EPPS), the Marlowe and Crown Social Desirability Scale, and the Rotter Internal/External Scale. As a result of the original validation study, it was found that five scales taken from the EPPS and the G-ZTS contributed most to the discrimination of hysterical traits (O'Neill, 1965). O'Neill later validated this shortened scale with normal women and found it to be a satisfactory measure of hysterical traits. It was later used to designate subjects as hysterical or nonhysterical for experimental studies

(O'Neill & Kempler, 1969; Jordan & Kempler, 1970). Thus, it appears that this scale possesses adequate validity data, but little is known about its reliability. In addition, different weights are assigned to each of the five scales from the EPPS and G-ZTS, and the present writer was unable to obtain further information on the use of this measure.

Lazare et al. (1966) devised a 140-item self-report questionnaire to measure oral, hysterical, and obsessional personality traits. As these scales were constructed to validate clinical descriptions through factor analysis, both reliability and validity data are lacking. Likewise, Crisp, Jones, and Slater (1978) devised the Middlesex Hospital Questionnaire, which included a measure of hysterical traits. Although this questionnaire was found by the authors to adequately differentiate those with anxiety, phobic, obsessional, and depressive disorders, the same claim could not be made for the hysterical scale. In addition, reliability and validity data are lacking and the length of each separate scale is somewhat of a problem, as it consists of only eight items.

Probably the most widely used and best known measure of hysterical traits is the Hysteroid-Obsessoid Questionnaire (HOQ). It is a 48-item, true-false rating form that is based on the assumption that hysterical and

obsessional traits can be dichotomized along a single dimension (Caine & Hawkins, 1963). Examination of this scale and its scoring criteria reveals that each question is scored zero if answered in the obsessional direction and one if answered in the hysteroid direction. Thus, it does not provide significant information on the degree of obsessional traits, as the maximum score that can be attained is zero. It has, in fact, rarely been used as a measure of obsessive traits in research. However, it does provide more useful information on the degree of hysterical personality traits, as this score can range from 1 to 48. The authors of the HOQ report reliability ranging from .74 to .85. They also claim a fair level of validity for this instrument. The correlation found between staff ratings of the hysterical behaviors of patients and their total score on the HOQ was .68 (Caine & Hope, 1967).

The claims for validity on instruments such as the HOQ become complicated by the high positive correlation that is found between measures of hysterical traits and the extroversion-introversion dimension of personality measured by such instruments as the Maudsley Personality Inventory, the Eysenck Personality Inventory, and the Sixteen Personality Factor Questionnaire (Eysenck, 1978). Given the hysterical person's general external

orientations and tendencies to be outgoing and socially uninhibited, it is not surprising that strong positive correlations have been found between personality measures of extroversion and hysterical traits. Hysterical disorders have long been viewed as disturbances found in the neurotic extrovert, while obsessional disorders have been classified as disturbances of the neurotic introvert (Eysenck, 1978). Thus, according to this paradigm, obsessive and hysterical patients are conceptualized as occupying opposite ends of the introversion-extroversion continuum.

The results of studies using both normals and inpatients that compared measures of extroversion and hysterical traits indicated a fairly close relationship between the two. This would appear to indicate that the boundaries between "normal" tendencies toward extroversion and tendencies toward being hysterical (i.e., neurotic) are not clear-cut (Pollack, 1981). Studies such as these would appear to lend some support to the notion of a healthy-maladaptive continuum that exists with respect to hysterical personality traits. It is also possible that it will always be somewhat difficult, at least on a questionnaire measure, to adequately detect the sometimes subtle differences between normal extroversion and hysterical behaviors.

The overall picture that emerges is that hysterical personality traits probably exist in varying degrees among most people. Despite the fact that this personality disorder has existed as a concept for a long period of time, there still are uncertainties as to some of the specific defining features. This is especially true with regard to the importance of suggestibility as an associated characteristic. While some of the differences that exist in the literature regarding the suggestibility of hysterical people could be attributed to the type of subject studied (inpatient or outpatient), part of this confusion is also undoubtedly due to uncertainties regarding the definition of the term "suggestibility."

Suggestibility

Suggestibility has been defined as the degree to which a person reacts positively or responds favorably to the suggestions of an experimenter (Barber, 1974). However, this seemingly simple definition belies the vagueness that has existed in the literature regarding the definition of this term.

Throughout most of the literature, the term suggestibility has been used to denote the easy induction of a deeply relaxed or hypnotic state, associated with high compliance with experimenter demands while in such states. This was undoubtedly the type of suggestibility

referred to by early writers when noting the strong suggestibility of hysterical people. Currently, most of the research in this area concerns the type of suggestibility seen in trance-like states.

A source of confusion regarding the exact definition of the term suggestibility has stemmed from the use of this term to denote gullibility, naivete, and tendencies to be easily influenced, as well as easy hypnotizability. However, unlike the hypnotic type of suggestibility, this other type exists at a waking, cognitive level. For quite sometime the two types of suggestibility were seen as unrelated, and it was not suggested until fairly recently that they were both related to a common mechanism.

Eysenck and Furneaux (1945) were among the first to propose that the two components of suggestibility be recognized by distinct terminology, in order to eliminate some of the vagueness regarding this term. The type of suggestibility seen in deeply relaxed states was referred to as primary suggestibility, while the type seen in waking states was referred to as secondary suggestibility. While Eysenck and Furneaux examined the two phenomena as though each operated independently of one another, the suggestion was made that a relationship between them might exist.

Barber (1957) was one of the first writers to postulate that a strong relationship existed between primary and secondary suggestibility. Based on his clinical observations, he stated that if a subject was found to be highly suggestible under hypnosis, then "odds are pretty good that he will be found to be very suggestible when awake" (p. 54). Later writers explored the relationship between primary and secondary suggestibility utilizing empirical methods and found support for Barber's claims.

Duke (1964) examined this relationship through the use of intercorrelations extracted from the data of 17 previous studies. Utilizing sophisticated statistical calculations, he found a small but significant relationship (.10) between tests of the two types of suggestibility. More recent studies, utilizing experimental designs have resulted in more significant relationships being found between primary and secondary suggestibility than those found by Duke.

Shames (1981) found a significant correlation (.55) between primary suggestibility and conformity, as well as between degree of suggestibility and grade of conformity (.66). Subjects were administered a standardized test of primary suggestibility and the scores were then correlated with performance on the classic Asch-type conformity experiment (Asch, 1956). Shames

concluded that measures of primary suggestibility were reasonably good predictors of secondary suggestibility, and both appeared to be tied to the same general construct. While this conclusion may be correct, the results of this study must be interpreted with caution, as preselected subjects were used in this study. All 10 subjects in the study were selected because they were known to be highly suggestible through previous research participation.

Miller (1980) also examined the relationship between primary and secondary suggestibility in an experimental design. He found a strong positive correlation between primary suggestibility and performance on a "suggested syllables" task. This was a test designed to measure social persuasibility. Miller concluded the results indicated that subjects who possess a high degree of hypnotic suggestibility will also be highly responsive to social expectations, making them suggestible in waking states as well.

In a similar vein, other studies (Calestro, 1972; Baker, 1982) have demonstrated not only that primary and secondary suggestibility are related, but also that waking suggestibility can have a profound effect upon what is experienced in a trance-like state. Baker studied the effects of experimenter instruction upon reported recollection of prior lives under hypnosis.

Prior to hypnotic induction, he gave instructions that were either neutral, encouraging, or discouraging toward the possibilities of remembering a prior lifetime. The type of instruction received by the subject was found to have a significant effect upon the "recollection" of former lives. Likewise, Barber (1965) used "task motivational" instructions to improve performance while under hypnosis. The instructions essentially lead the subject to believe that no one fails to perform well on a test of primary suggestibility if they are willing to try.

It appears, from the results of these studies, that there is some support for the postulation that primary and secondary suggestibility are related. However, experimental research in this area is scarce, and these findings must be interpreted with caution, as more work is clearly needed. Assumptions regarding secondary suggestibility cannot be made solely upon measures of primary suggestibility, although such a relationship might in fact exist.

There has been scant research examining personality variables associated with suggestibility. The few studies that do exist have reported often contradictory findings. Some studies (Tolor, 1971; Souheaver & Schuldt, 1978) have indicated that suggestible people tend to be so because of the tendency

to rely heavily on external demands and controls when formulating judgments. Other research failed to find a significant relationship between suggestibility and locus of control (Lohr & Souheaver, 1982; Leva, 1975). While some clinical observations indicated that extroverts tend to be more suggestible, other empirical research indicated that introverts tend to be more easily influenced (Frigon, 1977). Still other research failed to find any significance between suggestibility and the introversion-extroversion dimension of personality (Canale, 1976). Canale concluded that situational variables such as expectancy were more important predictors of primary suggestibility than specific personality traits.

While the results of studies examining the relationship between suggestibility, extroversion-introversion, and locus of control can at best be seen as inconclusive, systematic examination of other personality variables related to suggestibility is virtually nonexistent. This is particularly true of studies examining personality variables related to secondary suggestibility. Most of the research on secondary suggestibility originates from the writings of social psychologists studying such phenomena as conformity and social acquiescence. As such, possible factors contributing to individual differences in performance,

other than age, sex, or socioeconomic status were not addressed in these studies.

Speigel (1974) provided a clinical description of personality factors associated with strong primary suggestibility. He spoke of traits and characteristics associated with the "highly hypnotizable" person. Speigel stated that these people were quick to affiliate with new trends and were highly susceptible to environmental cues. They were also described as possessing a highly impressionistic cognitive style. Speigel stated that these were the kind of people who dealt well with ambiguity and did not appear to recognize apparent incongruities in their thinking. They were found to be capable of intense concentration, but only for limited amounts of time. Not surprisingly, Speigel mentioned hysterical traits specifically when describing the highly hypnotizable person. However, he described these traits in reference to patients exhibiting conversion reactions and not in terms of hysterical personality traits per se.

Johnson and Jaremko (1979) examined the relationship between suggestibility, sensation-seeking, self-preoccupation, and styles of loving in normal college students. The type of suggestibility measured was the primary type. They found strong positive correlations between suggestibility and traits that have been

described as characteristic of the hysterical personality, such as romantic outlook, disinhibition, and general sensation-seeking. However, the strongest correlation found in this study (.68) was between suggestibility and a style of loving that was termed agape, or self-sacrificing love. It should be noted that self-sacrifice is not a trait normally associated with the hysterical personality; it is in fact contradictory to what has been described as their self-centered style in relating to others.

A pilot study by the present writer (1983) examined the relationship between hysterical personality traits and suggestibility utilizing an experimental task. No significant relationship was found between hysterical trait level and the degree of suggestibility exhibited. Interestingly, the utilization of positively biased instructions before administration of a test of primary suggestibility also failed to significantly influence performance, a finding in conflict with results of previous studies.

Further investigation in this area is merited, however. It is the conclusion of the present writer that certain methodological problems prevented an adequate assessment of the possible relationship between hysterical traits and suggestibility. The assessment device used to classify subjects on hysterical

trait level has to be considered at least somewhat inadequate, as it lacked data on both reliability and validity. It is also quite possible that the suggestions given to subjects in the positively-biased instructions were simply too weak to exert a significant influence upon performance. Furthermore, the procedures in this study utilized a 40-minute autogenic relaxation sequence prior to the administration of the test of primary suggestibility. Subsequent review of the literature indicated that the relaxation sequence may have served to level initial subject differences in suggestibility. Leva (1974) found that the use of a 30-minute relaxation sequence significantly enhanced suggestibility in initially moderately susceptible subjects. Likewise, there is evidence from other studies (Barber & Wilson, 1978; Litvak, 1970) that the physiological response in muscle relaxation is highly similar to that of a light trance, which is known to increase suggestibility (Barber, 1957, 1965).

In conclusion, studies examining personality variables related to suggestibility have produced generally inconclusive results. While there is some evidence that primary suggestibility may be related to traits associated with the hysterical personality, this research must be interpreted cautiously. Research relating personality variables with secondary

suggestibility is largely nonexistent; however, there is evidence to indicate that a relationship exists between primary and secondary suggestibility. Clearly, more data is needed in this area in order to draw firmer conclusions.

Measurement of Suggestibility

There are several standardized measures of suggestibility, all of which measure hypnotic, or primary suggestibility. No standardized format has yet been developed to measure secondary suggestibility. In general, secondary suggestibility has been measured indirectly through such methods as conformity tasks or experiments involving acquiescence in judgment. As previously mentioned, Miller (1980) developed the Suggested Syllables Test, but at this point reliability and validity are being established in order to improve its utility as a research instrument.

Tests of primary suggestibility, on the other hand, have existed for quite sometime. Probably the earliest test of primary suggestibility was the body sway test. In this test, a subject stood with his or her eyes closed. It was then suggested by the experimenter that the subject was beginning to rock forward or backward. Amount of body sway was then measured, usually through the movement of a thread attached to the subject's clothing. Chevruels' Pendulum Test was

another early test designed to measure primary suggestibility. This test involved handing the subject a pendulum with the instructions to hold it perfectly still. It was then suggested to the subject that the pendulum could be made to move in a desired direction using only "mind power." A subject was considered suggestible if the pendulum rotated while the subject insisted that he or she did not consciously cause the movement.

While these tests were found to be useful indicators of primary suggestibility, the format of presentation was not standardized for either, thus limiting utility in research. As procedures varied from clinician to clinician, reliability and validity data were difficult to obtain on these tests. Currently, there are several standardized measures of primary suggestibility.

The Harvard Group Scale of Hypnotic Susceptibility is a paper and pencil test used to measure primary suggestibility (Shore & Orne, 1962). Reliability and validity are reported to be good and it is often used in research on group hypnosis. There are three other standardized tests of primary suggestibility, but unlike the Harvard scale, they consist of performance tasks. Two of these tests were developed through the work of Barber, and reliability and validity are

reported as satisfactory for both (Ruch, Morgan, & Hilgard, 1974; Barber & Wilson, 1978). The other standardized test, the Stanford Hypnotic Susceptibility Scale: Form A, was developed through the work of Weitzenhoffer and Hilgard (1959). As it is highly similar to the Barber Suggestibility Scale, this scale is often used interchangeably with the Barber scale in research.

The Barber Suggestibility Scale is an individually administered test, consisting of eight performance tasks presented in a highly standardized format. Administration requires roughly half an hour and can be used either with or without hypnotic induction. However, relaxation or induction of some sort is most often used prior to the presentation of the performance tasks. The test consists of such tasks as hand lowering and levitation, hand lock, thirst hallucination, and body immobility. Scoring consists of two measures, objective scoring by the experimenter and subjective scoring by the subject.

The Creative Imagination Scale, developed by Barber and Wilson, is a test of primary suggestibility utilizing many of the same tasks as the Barber scale. It is also administered either with or without hypnotic induction. Unlike the Barber scale, the Creative Imagination Scale can be administered in a group

setting. The scoring for this test consists of a self-report form completed by the subject after presentation of the 10 tasks. As this test is intended for group use, objective scoring is sacrificed. Reliability and validity were found to be satisfactory and scores on the Creative Imagination Scale were found to have a strong positive correlation with the Barber Suggestibility Scale (Barber & Wilson, 1978), which was found to correlate highly (.78) with the Stanford scale (Ruch et al., 1974).

The Barber Suggestibility Scale, the Harvard Group Scale of Hypnotic Susceptibility, the Creative Imagination Scale, and the Stanford Hypnotic Susceptibility Scale are the four tests that have been used consistently in research involving primary suggestibility. Useful standardized measures of secondary suggestibility have not as yet been developed. Experiments involving secondary suggestibility have generally examined the effects of experimenter instructions or the actions of a confederate upon the performance of a subject.

Statement of the Problem

Although a core of hysterical personality traits has been assumed to exist for quite sometime, little empirical validation of those assumed traits have been performed. Most of the knowledge in this area has

been derived from the descriptions of clinicians and a few factor analytic studies. Experimental research investigating this personality pattern has been largely nonexistent. A thorough review of the literature located only three studies that attempted to validate hysterical personality traits through the use of an experimental design (Pollack, 1981). Thus, most of what is known in this area is based upon the descriptions of a small number of case studies.

While there is a fair amount of agreement among clinicians on the characteristics defining the hysterical personality, one source of disagreement concerns the place of suggestibility as a defining trait. Some clinicians have concluded that suggestibility is a trait associated with conversion reactions, rather than the hysterical personality pattern. Other clinicians described suggestibility as a fundamental component of the cognitive style of hysterical people. However, the few factor analytic investigations of this personality pattern do not help in the resolution of this question, as one investigator found that suggestibility was a defining trait (O'Neill, 1965), and other investigators failed to validate suggestibility as a defining trait (Lazare et al., 1966, 1970).

The lack of clarity regarding the relationship between hysterical traits and suggestibility is

complicated by the fact that writers have failed to distinguish between primary and secondary suggestibility in discussions of such relationships. Early writers referred to the primary type when discussing the suggestibility of hysterical people. Later writers, such as Shapiro (1965) and Lindberg and Lindegard (1963) referred to secondary suggestibility when discussing the traits of hysterical people.

Examination of the literature on suggestibility reveals that most of it deals with primary suggestibility. Although there is evidence to indicate that the two types of suggestibility are related, studies on secondary suggestibility are comparatively few in number. Little research has been conducted to examine the relationship between personality variables and suggestibility. The few works that do exist have produced often contradictory and inconclusive results. There is an indication in the literature that primary suggestibility is related to traits normally associated with hysterical people, but it is based upon clinical descriptions of the "highly hypnotizable" subject. In general, the relationship between personality variables and secondary suggestibility has been largely unexplored. An experimental pilot study by the present writer that explored the possibilities of a relationship between hysterical traits and the two types of suggestibility was not

adequate to answer this question due to methodological problems.

Clearly, more experimental research is needed in this area. If suggestibility is in fact one of the traits seen in the hysterical personality, then experimental validation of suggestibility in such a personality pattern should be possible. An experiment examining both primary and secondary suggestibility would provide further information on the relationship between the two types of suggestibility. It would also provide further information on which of the two types, if either, is more strongly associated with hysterical personality traits. Since hysterical traits have been assumed to exist in varying degrees in normal people, particularly women, females differing in levels of hysterical traits should show differences in the degree of suggestibility exhibited in an experimental task. In addition, the degree of primary suggestibility exhibited should be significantly influenced by secondary suggestions subjects are given prior to the administration of the task. The present study was designed as a follow-up to the pilot study conducted by the present writer, the former correcting the methodological problems noted in the latter. In this manner, the question of a relationship between hysterical personality traits and suggestibility can be more adequately explored.

METHOD

Subjects

Seventy-eight females were preselected and recruited from two university residence halls. The majority of the subjects were 19-year-olds, second semester freshmen. However, the subject pool also included 23 upperclassmen and 1 graduate student. Approximately 30% of the subjects were enrolled in a psychology course.

Materials

Recruitment and categorization of subjects on hysterical trait level was accomplished through the distribution of a subject preselection form, consisting of two parts (see Appendix A). The first part of this handout was a cover letter explaining the purpose of the research; the remainder of the handout consisted of the 48-item, true-false Hysteroid-Obsessoid Questionnaire (HOQ). Presentation of the experimental task was accomplished through the use of a 30 minute audiotape. The tape first presented a brief breathing exercise, followed by presentation of the Creative Imagination Scale (CIS). The voice heard by subjects on the tape was that of the experimenter. Surveys presented to

subjects following the presentation of the experimental task consisted of two parts (see Appendix B). The first part was the Self-Rating Form for the CIS. This is a 10-item form on which subjects rate the degree of realism they experienced while imagining each of the tasks. Each of the 10 items is rated on a five-point interval scale. The total score on this self-rating form served as the measure of suggestibility. The second part of the survey was a personal questionnaire, requesting information on such topics as birth order, grade point average, academic major, and extracurricular activities.

Procedure

Subjects were recruited from Belk and Eggers Residence Halls at Appalachian State University. Recruitment and classification of subjects on hysterical trait level was accomplished through the distribution of the preselection questionnaires. These forms were given to all resident students by the resident assistants of the two halls. Incentives to participate were offered to prospective subjects; they consisted of extra credit slips to those volunteers enrolled in a psychology course, and a chance to win \$50 in a lottery. The resident assistant receiving the most completed questionnaires was also given a small prize.

The resident assistants returned 172 usable questionnaires from students indicating a willingness to participate in the study. The items of the HOQ were then scored and subjects that fell into the upper and lower 27% of the distribution were asked to participate. The overall mean score on the HOQ for this subject sample was 27.3, with a standard deviation of 5.85. The mean for the present sample was higher than previously reported scores on the HOQ for normal women. Slavney and Rich (1980) reported a mean of 23.30, and a standard deviation of 5.10. Scores in the present subject sample were also slightly skewed in the positive direction, with a median score of 28.65 and a modal score of 30.

A subject fell into the upper 27% of the distribution if her score was 31 or above, and was thus classified as being high on hysterical traits. The mean HOQ score for subjects in this group was 33.8. A score of 24 or below fell into the lower 27% of the distribution and subjects with such scores were classified as being low on hysterical traits. The mean HOQ score for this subject group was 20.7. A total of 97 of the respondents fell into the high and low categories.

Subjects, both high and low on hysterical traits, were then randomly assigned to one of three treatment conditions. A 2 x 3, between subjects design was

utilized, with at least 12 subjects being assigned to each of the six cells. In all treatment conditions, subjects were openly presented with experimenter demand characteristics, as they were all urged to try to do well on the experimental task. The independent variable manipulated was subject expectation of success. Subjects in the neutral condition, which was designed to measure differences in primary suggestibility, were led to have nonbiased expectations regarding their chances for success. These subjects were told that their probability of success was 50%.

The other experimental conditions were designed to provide a measure of the effects of a secondary suggestion upon subject performance. In one of these conditions, high expectancy, subjects were told that their chances for success was 90%, thus combining high expectations of success with the experimenter demand characteristics. Subjects in the other condition, low expectancy, were told that their chances of success were only 10%. The low expectancy condition was thus designed to separate the effects of demand characteristics from those of subject expectancy, as these subjects were told that they would probably not succeed at the task. Total scores on the Self-Rating Form for the CIS served as the dependent measure.

A total of 78 subjects were run, 39 each from the high and low hysterical categories. Table 1 shows the experimental design and provides information on the actual number of subjects and the mean HOQ scores for each of the six cells. All subjects were run in groups, ranging in size from 3 to 13. Each group contained subjects both high and low on hysterical traits, and the classification of each was unknown to the experimenter during the actual experiment.

The experiment was conducted in the social activities room in Belk Hall, where there were quiet surroundings and comfortable furniture. Procedures for all conditions were identical, with the exception of experimenter instruction. The instructions themselves differed only in the supposed percentages of people able to successfully perform the task, either 90, 50, or 10%, depending on treatment condition (see Appendix C). After instructions were read, the audiotape was begun. The taped breathing sequence was approximately three minutes long. This was immediately followed by the taped presentation of the Creative Imagination Scale, according to standard format. The experimenter remained in the room during the entire taped presentation. Following presentation of the task, subjects completed the Self-Rating Form for the CIS and the personal questionnaire. Each item on the Self-Rating

Table 1

Experimental Design

		Treatment		
		High Expectancy	Neutral	Low Expectancy
Hysterical Trait Level	High	n = 15 Mean HOQ = 33.5	n = 12 Mean HOQ = 34	n = 12 Mean HOQ = 34.25
	Low	n = 14 Mean HOQ = 20.7	n = 12 Mean HOQ = 20.6	n = 13 Mean HOQ = 20.15

Form was rated on an interval scale ranging from zero to four, with four being highly realistic. After completion of the two forms, all subjects were debriefed and given instructions on obtaining further information on the study.

RESULTS

The findings of the present study partially supported the experimental hypotheses. Figure 1 displays group mean scores on the Creative Imagination Scale (CIS) as a function of hysterical trait level and treatment condition. This figure illustrates higher scores on the CIS for high hysterical subjects than for low subjects across all treatment conditions. It also illustrates higher scores for both subject groups in the High Expectancy condition than in the other two. However, these conclusions were only partially supported in statistical analysis.

A 2 x 3 analysis of variance, conducted over scores on the CIS, was computed in order to statistically examine the main effects of trait level and treatment condition, as well as interactions between the two. As shown in Table 2, the ANOVA yielded a significant effect for hysterical trait level ($F(1, 71) = 5.714$, $p < .05$), but not for treatment condition ($F(2, 71) = 2.044$, $p > .05$). No significant interaction was found between treatment and trait level ($F(2, 71) = 0.172$, $p > .05$).

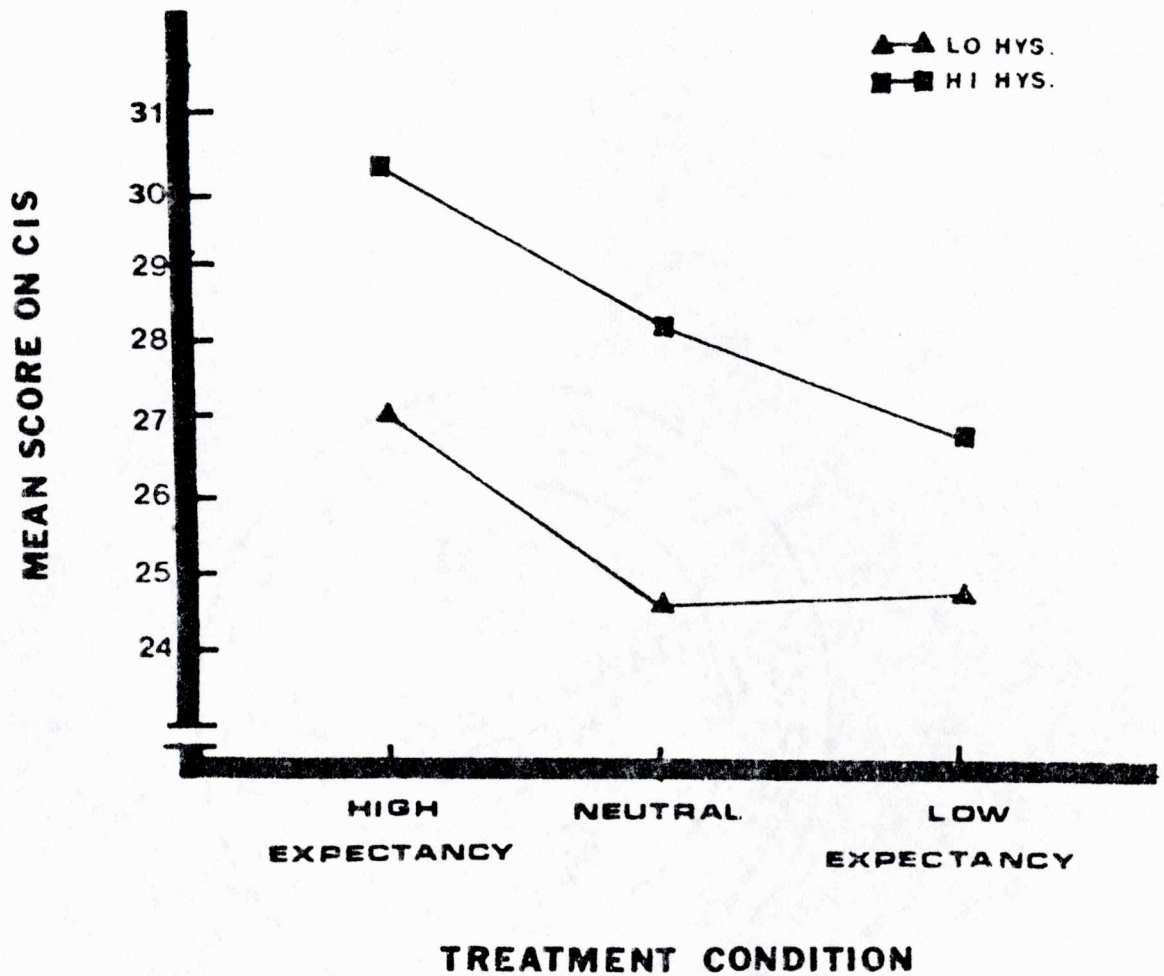


Figure 1. Group mean scores on the Creative Imagination Scale (CIS) as a function of hysterical trait level and treatment condition.

Table 2

Anova Summary Table for Scores on the Creative ImaginationScale

Source	<u>Df</u>	<u>MS</u>	<u>F</u>	Significance
Hysterical Trait				
Level (L)	1	150.97	5.714	p < .05
Treatment (T)	2	54.02	2.044	NS
T x L	2	4.55	0.172	NS
Error	71	26.42		

The overall sample mean on the CIS was both higher and less variable than previously reported findings on college students. The mean CIS score for this subject sample was 27.03, with a standard deviation of 5.35. A normative study reported a mean CIS score of 20.8, with a standard deviation of 8.6 (Barber & Wilson, 1973). Differences also emerged in the present subject sample upon examination of mean CIS scores for high and low hysterical groups. High hysterical subjects were found to have an overall mean score of 28.46, with a standard deviation of 5.85. Not surprisingly, low hysterical subjects were found to have a lower mean score. The mean score for this group was 25.58. Low hysterical subjects also appeared to have less variability across treatment conditions, with a standard deviation of 4.41.

Personal data were also gathered on each subject in regards to grade point average (GPA), birth order, academic major, and extracurricular activities. Although this information was gathered as descriptive data and was not analyzed statistically, some interesting differences were found between high and low hysterical subjects. Table 3 presents a summary of the personal data collected. As previously noted, the great majority of the subjects were freshmen. However, it appears that there was a substantially greater

Table 3

Summary of Personal Data for High and Low Hysterical Subjects
by Percentage*

Variable Examined	High Hysterical	Low Hysterical
<u>CLASS RANK</u>		
Freshmen	82	56
Sophomores	5	13
Juniors	5	15
Seniors	5	15
Graduate	3	0
<u>GRADE POINT AVERAGE</u>		
0.0 - 1.49	5	5
1.5 - 1.99	24	5
2.0 - 2.49	24	23
2.5 - 2.99	32	49
3.0 - 3.49	8	10
3.5 - 4.0	8	8
<u>BIRTH ORDER</u>		
First/Only	31	33
Middle	26	31
Last	44	36
<u>ACADEMIC MAJOR</u>		
Undecided	3	7
Business	7	26

Table 3 (continued)

Variable Examined	High Hysterical	Low Hysterical
Communications	12	7
Computer Sciences	3	15
Education	21	10
Fine Arts	3	3
Home Economics	12	10
Liberal Arts	3	7
Natural Sciences	7	10
Social Sciences	28	7
<u>EXTRACURRICULAR ACTIVITIES**</u>		
None	26	23
Athletic	36	8
Major-related Clubs	5	26
Service Organizations	0	13
Social Organizations	28	15
Religious	18	26
Other	10	15

*All figures rounded

**Many subjects declared more than one

percentage of freshmen among high hysterical subjects (82%) than among low hysterical subjects (56%). There appeared to be no relationship between birth order and level of hysterical traits. However, high hysterical subjects were slightly more likely to have been the youngest child in the family.

Differences between the two subject groups can also be noted upon examination of the data on choice of academic major and extracurricular activities. Among high hysterical subjects, the most frequently declared majors were those in the social sciences and in education. Among the low hysterical subjects, the most frequently declared majors were those in business and the computer sciences. There were also differences among the subject groups with regard to extracurricular activities. Among low hysterical subjects, the most frequently cited extracurricular activities were organizations related to academic major and campus religious organizations. In contrast, high hysterical subjects most frequently cited social organizations and athletic activities (i.e., aerobics, intramurals, and team sports) as their preferred activities. Overall, the two groups did not differ on the average number of extracurricular activities mentioned.

A posthoc analysis of mean GPAs for the two subject groups was performed in order to examine

differences in academic achievement. The mean GPA for the high hysterical group was 2.34, with a standard deviation of .67. Mean GPA for the low hysterical subjects was higher at 2.57, with a standard deviation of .56. Results of a t test indicated that the difference between the group means was statistically significant ($t = 1.6453, p < .05$).

DISCUSSION

The central finding of this study was that the degree of suggestibility exhibited in an experimental task differed systematically with levels of hysterical personality traits. Subjects high on hysterical traits were found to be more suggestible across all treatment conditions, confirming one experimental hypothesis.

The results of this study support the factor analytic research of O'Neill (1965), who found that suggestibility was one of six traits contributing to the discrimination of the hysterical personality pattern.

Likewise, the present findings also support the clinical observations of such writers as Shapiro (1965) and Lindberg and Lindegard (1963), who stated that suggestibility was a fundamental component of the holistic, impressionable cognitive style of hysterical people.

The present findings appear to refute conclusions drawn by Chodoff and Lyons (1958), and Lazare et al. (1966, 1970). Chodoff and Lyons contended that suggestibility was a trait seen in people exhibiting conversion reactions and not necessarily in people with hysterical personalities. In both the Lazare et al. studies, suggestibility was dismissed as a defining

trait in the hysterical personality because it failed to load significantly as a factor. As previously mentioned, one possible reason for the disparity between the Lazare et al. studies and the present findings is that the suggestibility scale used by Lazare et al. may actually be measuring another factor, such as passivity.

The finding that people high on hysterical traits are more suggestible than those low on such traits is valuable in that it supports other empirical research validating some of the other core traits attributed to the hysterical personality by clinicians. Most of the empirical research in this area is correlational in nature. As previously mentioned, O'Neill (1965) validated six factors attributed to this personality type by clinicians, while Slavney et al. (1977) found high correlations between level of hysterical traits and lability of affect. Although experimental research with this personality type is rare, the few studies that do exist have also confirmed the validity of certain traits attributed to the hysterical personality. One such example is found in the work of O'Neill and Kempler (1969). In this study, hysterical females were found to be more avoidant of blatantly sexual stimuli than nonhysterical females. Whether experimental or correlational in nature, it can be seen from these

studies, as well as the present one, that it is possible to empirically examine and validate traits attributed to certain personality patterns. Investigators need not rely solely upon clinical descriptions and case studies.

It can be stated, from the present results, that the degree of primary suggestibility exhibited is related to the level of hysterical personality traits. However, the same claim cannot be made in regard to secondary suggestibility, although it may be true. The hypothesis that use of a secondary suggestion would significantly influence performance on a test of primary suggestibility was not confirmed. Manipulating subject expectancy of success had no significant influence upon performance. This finding is in conflict with all of the literature reviewed in this area (Baker, 1982; Calestro, 1972; Barber, 1965). The present finding is especially at odds with conclusions drawn by Canale (1976). Canale examined the effects of situationally-controlled suggestibility upon Jungian personality types. Canale concluded that expectancy was the important predictor of suggestibility, and not specific personality types. The present finding, that hysterical trait level significantly influenced performance but expectancy did not, lends itself to the opposite conclusion.

The failure of the secondary suggestion to influence performance on the primary suggestibility task is puzzling in that it conflicts with what was predicted by all of the literature reviewed. However, it must be noted that research in this area is still in an exploratory phase and rather scarce. It is not yet exactly definite what mechanisms are at work in primary and secondary suggestibility, or what the difference between the two processes may be. It is possible that the two phenomena spring from the same central mechanism, and there may be no fundamental difference between the two types of suggestibility, other than whether the subject is fully awake or deeply relaxed while responding to suggestions. Although none of the literature reviewed has stated this directly, there is certainly support for the notion that a person found to be highly suggestible under hypnosis will be found to be suggestible when awake as well (Barber, 1957; Miller, 1980).

In the present study, it is plausible that information given to subjects regarding their probability for success with the task was implanted so subtly within the instructions that they went largely unnoticed. However, the experimenter observed one curious reaction among subjects in the low expectancy condition, never seen in the other conditions, that would appear to

question this notion. After being read the standard instructions, subjects in the low expectancy condition began to giggle at the onset of the experimental task, giving the impression they thought it silly. This reaction was noted among all subject groups in this condition. While it is possible that this reaction was merely coincidental, it is also possible that the low expectancy for success led these subjects to take the task less seriously, indicating they had noted the expectancies for success given in the instructions. However, after this initial reaction, subjects in the low expectancy condition were as attentive to the task as subjects in other conditions, and their scores on the dependent measure did not differ significantly.

There is one other possibility to consider in the interpretation of the present finding. Perhaps merely informing a subject about his or her probability of success with a certain task is not enough. The possibility exists that in order to significantly influence performance on a suggestibility task, an experimenter must make more of a "sales pitch" for responding in a particular direction. Perhaps demand characteristics are a more important influence than expectancy for success when considering secondary suggestibility. Assessing the validity of these possibilities, however, is beyond the scope of the present study. It is clear

that the results of this study have raised some questions as to the exact nature of the relationship between primary and secondary suggestibility.

Another interesting finding of the present study that should be noted is the HOQ data for this subject sample. The overall mean score on the HOQ was 27.3, fully four points higher than previously reported norms (Slavney & Rich, 1980). Although there was a 13-point difference on the mean HOQ score for the high and low hysterical groups in the present sample, the mean for the low hysterical group was only two points lower than the overall mean reported by Slavney and Rich. In addition, the HOQ scores for the present subject sample were skewed in the positive direction. It appears that these college women were somewhat more hysterical overall than the normative population.

There were several factors which may account for this finding, probably the most important of which is the age of the women studied. The median age of the subjects in Slavney and Rich's sample was 27, approximately eight years older than the median age of the present sample. As previously noted, the great majority of the subjects in the sample were 19-year-old freshmen, most of whom were probably at the late adolescent state of development. It is not surprising that women at this stage of development might score

higher on a measure of hysterical traits. There are, during this stage, strong tendencies to be influenced by peers and by fads, as well as toward being impulsive and looking toward the external world as a source of information on self-identity. All of these qualities are evident in the hysterical personality pattern, and it is interesting to note that a substantially greater percentage of the high hysterical subjects were freshmen, while a greater percentage of upperclassmen were low on hysterical traits.

While this finding may be a fluke, it is also quite possible that in order to be successful in college, one must develop behaviors and attitudes that could be termed somewhat obsessive, a personality pattern long held by clinicians to be the opposite of the hysterical pattern. Along this line, it is interesting to note that low hysterical subjects had a significantly higher mean GPA than high hysterical subjects. However, whether this difference in academic achievement is due mostly to the greater degree of obsessive traits in the low hysterical group, or merely to the greater number of upperclassment in this group cannot be determined from the present data.

Examination of the other personal data collected on subjects also yielded some interesting differences. These differences are noteworthy because they fit

nicely with clinical theories on the opposing preferences of obsessive and hysterical people. Differences between the two subject groups are clearly noted upon examination of the data on choice of academic major and extracurricular activities.

Not only did the academic majors most popular with one group tend to be least popular with the other, it also appears that there were some qualitative differences in the majors they chose. The most popular majors with the high hysterical group, social sciences and education, are not only more traditionally feminine majors, they are also in people-oriented fields. In contrast, the most popular majors for low hysterical subjects, business and computer sciences, are less traditional majors for women and in technically-oriented fields. Differences are also seen between the two subject groups in the choice of extracurricular activities. Low hysterical subjects appeared to be more interested in activities promoting spiritual and professional growth, while high hysterical subjects were more socially inclined. Even though more high hysterical subjects engaged in athletic activities, close examination reveals that the most popular of these activities, aerobics and intramurals, are usually tied to one's social groups as well.

In summary, the results of the current study lend validity to the clinical assertion that suggestibility is a defining trait of the hysterical personality pattern. However, at this point, it cannot be stated clearly whether the increased suggestibility seen in hysterical people will be solely of the primary type, or of both the primary and secondary type. The present findings are important in that they support both clinical literature and other empirical findings in an area where research is rather sparse. Examination of the personal data collected on the present subject sample also appears to lend some support to the clinical notion that hysterical and obsessive preferences are opposed to one another.

The findings presented in this study also point to the need for further research in several areas. First and foremost, it is clear that much more information is needed on the relationship between primary and secondary suggestibility. Whether these are two separate phenomena or merely different manifestations of the same phenomenon is a question that needs to be investigated in future research. Along the same lines, more information is also needed on the relative influence of subject expectancy and demand characteristics upon subject performance in suggestibility tasks.

The present study is one of few that have attempted to examine traits attributed to the hysterical personality in an experimental design. More experimental research would be valuable in the validation of other traits attributed to the hysterical personality, such as emotional reactivity, denial, and impressionistic cognitive style. Examining the effect of a male experimenter upon hysterical subjects engaged in an experimental task would be another interesting variable to explore. In this manner, more empirical evidence could be gathered to support the case studies of clinicians. Experimental investigation would be valuable in the validation of traits attributed to other personality patterns as well.

Future research might also focus upon the stability of hysterical traits as maturation occurs. As self-identities become more firmly established and peer pressure less powerful, it is possible that subjects will obtain lower scores on measures of hysterical traits such as the HOQ. Also worthy of future consideration is the influence of personality factors upon the choice of academic major. Most of the subjects in the present sample were freshmen, who were at least a year away from formally declaring a major. However, even as freshmen, high and low hysterical subjects tended to be very different in their choice of majors.

It would be valuable to gather similar data on college seniors, in order to assess whether these differences become more polarized or insignificant as the academic career progresses.

Lastly, more normative HOQ data are needed on males. It would be interesting to perform a replication of the present study using males as subjects. In this manner, it could be assessed whether males and females with the same levels of hysterical traits will respond differently to an experimental task. Also worthy of exploration is the sex difference that is said to exist with regards to hysterical traits and behaviors. The notion that behaviors labeled "hysterical" in women are labeled "antisocial" in men is certainly worth further empirical examination.

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APPENDIX A

Subject Preselection Form

Cover Letter

DEAR RESIDENT STUDENT:

THIS COULD BE WORTH \$50.00 TO YOU!!!!!!

Please help me to do my thesis research project. I am a graduate student in psychology and I will be conducting my study in late March and early April. This will be a rather fun study, as it involves creative imagination. However, I will need your help in order to do my study in this area.

It will only involve about a half-hour of your time if you are chosen to participate, and it can be worth extra credit to you if you are currently enrolled in a psychology course. From all of you that complete the questionnaire, I will choose approximately 60 subjects to participate in the study. The actual experiment will take place in Belk Residence Hall in the late afternoon and early evening hours, and times will be fairly flexible. All participants who are currently taking a psychology course will be given extra credit slips to give to their professors if he/she is giving extra credit. In addition, the names of all participants will be placed in a drawing, and the winner will receive fifty dollars for her time. Only a limited number of subjects are being asked to participate.

Please take five minutes to fill out this questionnaire, and return it to your R.A. Answer the questions as you feel honestly represents you and please answer all 48 questions. The questionnaire is not an experiment. It will only allow me to choose participants for the study. If you are willing to help, please fill out the information below, LEAVING THIS SHEET ATTACHED. I need your name and number in order to contact you. Thank you very much.

Darolyn Hilts

Name _____ Residence Hall _____
Phone _____ Room Number _____

Self-Description Questionnaire (HOQ)

Instructions. Read over each question and decide whether it is a true description of how you usually act or feel, then circle True if the statement describes you, or False if it does not. Do not spend too much time over any question. Take your first reaction bearing in mind your usual way of acting or feeling. Do not miss any question. There are no right or wrong answers.

- | | | |
|---|------|-------|
| 1. I find it hard to think up stories. | True | False |
| 2. I like to wear eye-catching clothes. | True | False |
| 3. I keep my feelings to myself | True | False |
| 4. I am slow about making up my mind about things because I weigh all the pros and cons. | True | False |
| 5. I am a moody sort of person, with lasting moods | True | False |
| 6. I have rigid standards I feel I should stick to. | True | False |
| 7. When I am working, I like a job which calls for speed rather than close attention to detail. | True | False |

8. I like to ask for other people's
opinions about myself. True False
9. I don't feel awkward when meet-
ing people because I know how
to behave. True False
10. I prefer to be popular with
everyone than to have a few
deep lasting friendships True False
11. I cannot shake off my troubles
easily even if I get the
opportunity. True False
12. I have a good imagination. True False
13. I keep quiet at parties or
meetings True False
14. I feel better after I've had
a good argument and gotten it
off my chest True False
15. I am quick in sizing up
people and situations. True False
16. My mood is easily changed by
what happens around me True False
17. My conscience seldom bothers
me True False
18. I keep a place for everything
and everything is in its
place. True False

19. I'm rather lacking in social
graces True False
20. I have the same friends now
as I had years ago True False
21. It pleases me to be the center
of a lively group. True False
22. I like to show people exactly
how I feel about things. True False
23. The first impressions or
reactions are usually the
right ones in the end. True False
24. I do not mind if things turn
out badly as long as I know
I did the right thing. True False
25. I can lead more than one
life in my imagination True False
26. I like discussing myself
with other people. True False
27. I do not show my emotions
in front of people True False
28. When someone asks me a
question, I give a quick
answer and look for the
reasons later. True False

- 29. If I am not in the right mood
for something, it takes a lot
to make me feel differently. True False
- 30. I can usually get by without
having to worry whether I've
done the right thing morally
or not True False
- 31. One can understand most
things without having to go
into all the details True False
- 32. It is important to be
fashionable in your clothes,
opinions, etc. True False
- 33. My party manners are pretty
good True False
- 34. The only friends I have I
keep True False
- 35. If I happen to be upset
about something, it seems to
carry over into all I do for
a long time. True False
- 36. I cannot completely lose
myself in a book or story. True False

37. I like to sit in the back-ground or in an inconspicuous place at socials, meetings, etc. True False
38. I act out my feelings. True False
39. I wait until I am sure of all my facts before I make a decision True False
40. I spend a great deal of time worrying about the rights and wrongs of conduct. True False
41. When going into a room or meeting someone for the first time, I get a strong general impression first and only gradually take in the details. True False
42. When meeting people I haven't met before, I usually feel I make a rather poor impression True False
43. It upsets me to leave friends and make new ones even when I have to. True False
44. When watching a play, I identify myself with the characters. True False

45. My feelings about things
and toward other people
seldom change. True False
46. I do not like taking a
leading part in group
activities True False
47. Mistakes are usually made
when people make snap
decisions. True False
48. If two people find they
disagree about things,
they shouldn't try to
carry on being close
friends. True False

APPENDIX B

Subject Response Form

Self-Rating Form
Creative Imagination Scale

Name _____ Age _____
Class Rank _____ Date _____

PLEASE ANSWER EACH ITEM AS HONESTLY AS POSSIBLE. THERE ARE NO RIGHT OR WRONG ANSWERS.

Read the statements below describing the possible responses for each item. Then, circle the number (0, 1, 2, 3, 4) which corresponds to the statement that most nearly matches your experience.

1. In the first test, you were asked to imagine that one, two, and then three dictionaries were being piled on the palm of your hand. Compared to what you would have experienced if three dictionaries were actually on your hand, what you experienced was:

0	1	2
0%	25%	50%
Not at all the same	A little the same	Between a little and much the same
3		4
75%		90% +
Much the same		Almost exactly the same

2. In the second test, you were asked to think of a strong stream of water from a garden hose pushing up against the palm of your hand. Compared to what you would have experienced if a strong stream of water were actually pushing against your palm, what you experienced was:

0	1	2
0%	25%	50%
Not at all the same	A little the same	Between a little and much the same
3		4
75%		90% +
Much the same		Almost exactly the same

3. In the third test, you were asked to imagine that Novacain had been injected into your hand and it made your fingers feel numb. Compared to what you would have experienced if Novacain had actually made two fingers feel numb, what you experienced was:

0	1	2
0%	25%	50%
Not at all the same	A little the same	Between a little and much the same

3	4
75%	90%
Much the same	Almost exactly the same

4. In the fourth test, you were asked to think of drinking a cup of cool mountain water. Compared to what you would have experienced if you had actually been drinking cool mountain water, what you experienced was:

0	1	2
0%	25%	50%
Not at all the same	A little the same	Between a little and much the same

3	4
75%	90% +
Much the same	Almost exactly the same

5. In the fifth test, you were asked to imagine smelling and tasting an orange. Compared to what you would have experienced if you were actually smelling and tasting an orange, what you experienced was:

0	1	2
0%	25%	50%
Not at all the same	A little the same	Between a little and much the same

3	4
75%	90% +
Much the same	Almost exactly the same

6. In the sixth test, you were asked to think back to a time when you heard some wonderful music and to reexperience hearing it. Compared to what you would have experienced if you were actually hearing the music, what you experienced was:

0	1	2
0%	25%	50%
Not at all the same	A little the same	Between a little and much the same

3	4
75%	90% +
Much the same	Almost exactly the same

7. In the seventh test, you were asked to picture the sun shining on your hand, making it feel hot. Compared to what you would have experienced if the sun were shining on your hand, what you experienced was:

0	1	2
0%	25%	50%
Not at all the same	A little the same	Between a little and much the same

3	4
75%	90%
Much the same	Almost exactly the same

8. In the eighth test, you were asked to imagine time slowing down. Compared to what you would have experienced if time actually slowed down, what you experienced was:

0	1	2
0%	25%	50%
Not at all the same	A little the same	Between a little and much the same
3	4	
75%	90% +	
Much the same	Almost exactly the same	

9. In the ninth test, you were asked to think back to a time when you were in elementary school. Compared to the feelings you would have experienced if you were actually in elementary school, what you experienced was:

0	1	2
0%	25%	50%
Not at all the same	A little the same	Between a little and much the same

3	4
<hr/>	
75%	90% +
Much the same	Almost exactly the same

10. In the last test, you were asked to picture yourself lying under the sun and becoming very relaxed. Compared to what you would have experienced if you were actually relaxing on a beach, what you experienced was:

0	1	2
<hr/>		
0%	25%	50%
Not at all the same	A little the same	Between a little and much the same

3	4
<hr/>	
75%	90% +
Much the same	Almost exactly the same

Personal Questionnaire

PLEASE BRIEFLY ANSWER THE FOLLOWING QUESTIONS:

1. What is your current or intended major?

2. What is your current G.P.A.?

3. What extracurricular activities are you involved with currently?

4. What is your birth order within your family?

APPENDIX C

Experimenter Instructions

Instructions

The experiment you are about to participate in is being conducted to study creative imagination. I am interested in how people imagine different sensory experiences. I would like to begin by asking that all of you get as comfortable as you can in your seats, with both feet flat on the floor.

For the next 20 minutes, you will all listen to this tape, on which you will be asked to imagine 10 different tasks. Some will ask you to imagine sounds, others will ask you to imagine sights, smells, and other bodily sensations. This is a standardized scale that has been previously used in research. Prior research has shown that (10%, 50%, 90%) of all people were able to imagine the tasks with a high degree of realism. I would like each of you to follow the instructions on this tape as they are given and allow yourself to imagine these scenes as vividly as possible. You should keep your eyes closed the entire time the tape is playing. After the tape is finished, I will ask you to fill out a questionnaire for me on which you will rate your experience with each of the 10 tasks, as well as a short form asking for some information about you.

VITA

Darolyn Hilts was born on October 19, 1959 in Biloxi, Mississippi. A member of a military family, she traveled often and has lived in such diverse places as Texas, Alaska, Tennessee, Massachusetts, and Oregon. At the age of 17, her father retired from the Coast Guard and her family settled in Elizabeth City, North Carolina. She completed her high school education in Elizabeth City, at Northeastern High School. Darolyn was awarded the Bachelor of Arts degree in May, 1982 from Appalachian State University, in the field of psychology.

Darolyn began her graduate program in Clinical Psychology in August, 1982, and plans to graduate in May, 1985, following completion of her internship requirements. She is a member of the American Psychological Association, the North Carolina Psychological Association, and the National Psi Chi Association for psychologists. Her permanent address is:

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