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THE PARTIAL VALIDATION OF THE HYSTERICAL AND
OBSESSIVE COMPULSIVE SCALES OF SEIK'S
NEUROTIC STYLES INVENTORY

A Thesis

by

CRAIG FARMER

Submitted to the Graduate School
Appalachian State University
in partial fulfillment of the requirements
for the degree of
MASTER OF ARTS

November 1985

Major Department: Psychology

THE PARTIAL VALIDATION OF THE HYSTERICAL AND
OBSESSIVE COMPULSIVE SCALES OF SEIK'S
NEUROTIC STYLES INVENTORY


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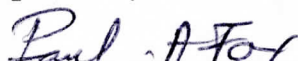
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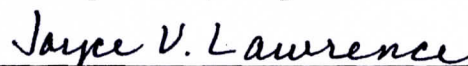
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ABSTRACT

THE PARTIAL VALIDATION OF THE HYSTERICAL AND OBSESSIVE
COMPULSIVE SCALES OF SEIK'S NEUROTIC STYLES
INVENTORY. (November 1985)

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The purpose of this study was to explore concurrent and construct validity data for the obsessive compulsive and hysterical scales of Seik's Neurotic Styles Inventory (NSI). These NSI scales were compared with the hysteric and compulsive scales of the Multivariant Personality Inventory (MPI) and the Hysteroid-Obsessoid Questionnaire (HOQ). All five scales were administered to either seniors or graduate students majoring in either accounting or theater (theater group and accounting group). They were also administered to undergraduates enrolled in either introductory psychology classes or developmental psychology classes (control group). Correlations between the five scales were examined, and an analysis of variance was used to examine differences

among the three groups and between male and female subjects for the entire sample for each scale.

The NSI obsessive compulsive scale correlated significantly and in the predicted direction with the MPI compulsive scale and the HOQ. This scale also showed an unexpected negative correlation with the NSI hysterical scale, but failed to show a significant correlation with the MPI hysteric scale. This scale differentiated significantly between the accounting and theater subjects and the accounting subjects and control group but did not significantly differentiate between the theater subjects and control group subjects.

The NSI hysterical scale correlated significantly and in the predicted direction with the MPI hysteric scale, the MPI compulsive scale, and the HOQ. This scale showed a significant negative correlation with the NSI obsessive compulsive scale and was the only scale to show a significant sex difference. The NSI hysterical scale significantly differentiated between the same groups as did the NSI obsessive compulsive scale. Suggestions were made for further research.

ACKNOWLEDGEMENTS

I wish to thank those persons who served on my thesis committee for their direction, assistance, and support. A special thanks to all persons who helped with the data collection process.

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INTRODUCTION

The concept of character type (or personality type) has a long history which has changed dramatically over the years. The traditional psychoanalytic concept of character type stresses the libidinal forces which are transposed by the ego functions into neurotic behavior. For the reason, instinctual drives and their vicissitudes are the primary focus of the psychoanalytic studies of personality. Neurotic individuals are viewed as being either passively moved by or protected from (via the defense mechanisms) the demands of these libidinal forces (Freud, 1914).

Hartmann (1958) expands the psychoanalytic model of personality somewhat to include the consideration of psychological structures which are relatively independent of the libidinal drives and conflicts. He focuses on the importance of the ego and ego development in understanding personality structures and felt that the ego strongly influences how individuals handle these instinctual drives.

Klein (1954) further develops the concept of personality structure through his theory of "cognitive

tendencies." These cognitive tendencies are perceived as regulatory or control structures within one's personality which determine the form of the influence instinctual drives or needs exert over cognition. Klein states that a variety of cognitive tendencies are available to an individual, and he uses the expression "cognitive style" to denote the total arrangement of such tendencies within one's personality.

Shapiro, in his book Neurotic Styles (1965), uses the word "style" to connote the overall form or mode of functioning that can be gleaned from a wide range of behaviors. He stresses modes of functioning which encompass ways of thinking, perceiving, and experiencing emotion. His formulation differs from the earlier psychoanalytic idea of character type by emphasizing not only the traits which delineate particular types, but also styles of processing information. The term "neurotic style" refers to those modes of functioning which appear characteristic of the various neurotic conditions.

Shapiro first became interested in the styles or modes of functioning of various personality types through his work with psychological tests, especially the Rorschach. He reasoned that, since the individual ways of thinking and perceiving are the primary material from which diagnoses, character traits, and

defense mechanisms are inferred, then the mode of thinking may be one factor that determines both pathological symptoms and adaptive traits. Shapiro contends that an individual's mode of thinking evidences formal consistencies which are stable over time and from which emerge an individual's traits.

Four neurotic styles are discussed by Shapiro (1965): obsessive compulsive, paranoid, hysterical, and impulsive. He does not consider these styles to be all inclusive, nor is his discussion of each exhaustive. Traits, forms of cognition, activity, emotional experiences, defense mechanisms, and ways of perceiving are discussed for each neurotic style. His intention is not only to list symptoms for use in clinical diagnosis, but to present the subjective experience of the neurotic and offer insight into how such individuals operate.

The neurotic styles to be considered in the present study are the obsessive compulsive and hysterical styles. According to Shapiro (1965), obsessive compulsives are characterized by rigidity of thinking, a forced mode of attention which focuses on technical data from the environment, intense intellectual concentration, and a remarkable distortion of the normal function and experience of volition. The hysterical style, on the other hand, is characterized by use of

repression combined with global and impressionistic cognitive and affective processes.

Obsessive Compulsive Style

Shapiro (1965, pp. 25-26) characterizes the obsessive compulsive's style of thinking as "rigid." Such individuals are often viewed by others as "dogmatic" or "opinionated." They are unable to freely shift their attention from one subject to another, thus appearing to ignore new facts or different points of view presented by others. In general, they lack cognitive flexibility.

Although they lack the ability to freely shift their attention, their ability for concentration and sharply focused attention is a conspicuous characteristic of obsessive compulsive individuals. This is evident when considering their high frequency of small detail responses on the Rorschach. Obsessive compulsive individuals seem unable to view their world in a passive, impressionistic, holistic manner. They appear rather to always be actively concentrating on details in their environment. They do not allow their attention to passively wander, and thus they rarely get hunches and rarely are struck or surprised by anything (Shapiro, 1965, pp. 26-28).

These individuals usually have sharply defined interests, and they doggedly pursue these interests.

Their overall approach towards life is to first get the facts and details of a given situation. However, in doing so they often miss those aspects of the situation which give it its flavor or import. Their approach is one of single-minded concentration; this concentration is maintained under continuous tension and is narrow in focus. The obsessive compulsive views distractions as uncomfortable hindrances to be avoided. Shapiro (1965, pp. 28-38) describes this quality as an "active inattention" to external influences of distractions.

The obsessive compulsives' quality of active inattention or intellectual rigidity often endows them with excellent technical facility, an impressive capacity for concentration on technical problems, and meticulous work habits. For this reason they are often quite successful in professions such as engineering, accounting, and other technical fields (Shapiro, 1965, p. 30).

The mode of activity of the obsessive compulsive is characterized not only by sheer quantity, but also by the intensity and concentration in which activities are carried out. Such individuals are enormously productive and seem to be continuously active at some kind of work. They approach their work with a sense of effort, a tense deliberateness. They tend to invest the same quality of effort in every activity, whether

it taxes their capacities or not. Such a quality of effort is generally more expected in the work area and is thus less noticeable in that environment. However, obsessive compulsives approach all activities in an effortful manner. The compulsive person tries just as effortfully to "enjoy" himself at play as he does to accomplish or produce at work. This continuous effortfulness, trying, and tense deliberateness is a way of life for these individuals (Shapiro, 1965, p. 32).

Indeed, there is a drive quality to the obsessive compulsive's mode of activity. They approach their daily activities in a manner which gives the appearance of being pressed or motivated by something beyond themselves. They do not necessarily appear enthusiastic and may not appear genuinely interested in the activity at all. Instead, the obsessive compulsive act and feel as though they were being pressed by some requirement or necessity they are trying very hard to satisfy. However, this is not an external requirement but rather a requirement and a pressure they impose upon themselves (Shapiro, 1965, p. 33).

Shapiro (1965, pp. 34-41) contends that the obsessive compulsive's mode of activity reflects a distortion of the normal function and experience of will or volition. This style of activity implies a special kind of self-awareness--a type of self-awareness which

is somewhat like an overseer who sits behind the obsessive compulsive person and issues commands, directives, and reminders. These individuals do not feel that they are wholly responsible for issuing these directives, but instead feel that they are reminding themselves of some compelling necessity which is dictated by external pressures such as the threat of possible criticism, the weight of authoritative opinions, social conventions, or above all, overriding moral principles. The superego of the obsessive compulsive is, therefore, considered as unusually harsh. Shapiro suggests that the overuse of such terms as "I should" or "I must" is indicative of the compulsive person's harsh superego.

The restricted style of functioning of the obsessive compulsive is especially evident in their affect. They are unable to relax their attitude of intense concentration and deliberateness and therefore often appear restricted, mechanical, and preoccupied. Compulsive individuals may feel that any relaxation of deliberateness or purposeful activity is somehow improper or unsafe. When such individuals do experience a relaxation of volitional tensions, they often describe these feelings as a "loss of control" or possibly "I feel like I'm going crazy." Any slight

abandonment to impulse or whim is experienced as discomforting for these people (Shapiro, 1965, pp. 43-45).

Another discomforting experience for the obsessive compulsive is decision making. Neither hard work nor driven activity is necessarily helpful in the process of decision making, especially if the decision to be made is more a choice of personal preference than merely the right answer to a technical problem. After a prolonged period of hesitation, worry, a meticulous weighing of pros and cons, and attempts to apply external principles to aid in reaching a solution, the actual decision is often made abruptly and even haphazardly in order to reduce the tension experienced over being faced with a choice (Shapiro, 1965, pp. 45-48).

Hysterical Style

The nature and concept of repression plays an important role in the cognitive style of the hysterical personality. Strafer (1948) implies that because of the deployment of the defense mechanism of repression, the hysterical personality demonstrates the characteristic hysterical mode of cognition. Shapiro (1965) has reversed this common psychoanalytic interpretation through his contention that the hysterical mode of cognition favors the operation of repression.

Shapiro (1965, p. 112) describes hysterical cognition as global, impressionistic, and relatively

diffuse which is in direct contrast to the obsessive compulsive's objective, sharply focused, and detailed mode of cognition. These cognitive characteristics are also evidenced by the type of responses hysterical individuals give during Rorschach testing. They have few detail responses and a high frequency of whole and color responses.

Because hysterical persons live in a subjective world which they perceive as vivid, colorful, and emotionally charged, they are highly susceptible to only those aspects of their environment which are striking or immediately impressive. They do not search for things in their environment, as the obsessive compulsive actively searches for factual knowledge, but are passively struck by the vivid, dynamic aspects of their surroundings. Such individuals are easily distracted and exhibit a marked incapacity for intense, intellectual concentration (Shapiro, 1965, pp. 109-116).

Because of the hysteric's impressionistic, cognitive style, one would also expect him/her to exhibit poor memory for factual, detailed information. According to Shapiro (1965, pp. 109, 112, 116, 117) this deficiency in general factual information is a reliable diagnostic indicator of the hysterical personality and is closely related to the mechanism of repression. Shapiro views repression as the forgetting or the loss

of ideational contents from consciousness. Therefore, the impressionistic cognitive style of the hysteric favors the use of repression as a defense. The relationship between repression and the cognitive style of the hysteric is often demonstrated during the inquiry procedure of Rorschach testing. Although hysterical people usually do not forget their original responses, they are often unable to describe the specific aspects of the blot which generated those responses during the inquiry part of testing.

Hysterical individuals have the capacity to exhibit great emotion and tend to view reality from a romantic and sentimental perspective. One would expect that the vivid emotional life of the hysterical person would also guarantee an equally vivid and defined sense of one's self, a sense of substance, but this is usually not the case with such individuals. Their emotionality is often exaggerated and unconvincing, and their behavior may have a theatrical or play-acting quality. Hysterical people are often viewed by others as ungenue and shallow; however, when they do feel "serious" emotions which carry deeply felt meaning and import, it is often experienced by them as extremely discomfoting (Shapiro, 1965, pp. 118-126, 131-132).

For Shapiro (1965), both the hysterical style and the obsessive compulsive style may be either adaptive

or maladaptive for any given individual. As noted above, one would expect hysterical individuals to make good actors and obsessive compulsive individuals to perform well in jobs such as accounting and engineering. It is when these personality styles are extreme to the point of interfering or diminishing one's capacity to effectively relate to his/her environment that they are to be considered pathological.

Existing Measures

Several questionnaires and scales have been developed to measure obsessive compulsive and hysterical characteristics. Most of these instruments have been restricted to descriptions of behavioral manifestations, personality traits, and defense mechanisms employed and have been developed under a psychoanalytic paradigm. The research does, however, include some measures which are consistent with Shapiro's (1965) description of hysterical and obsessive compulsive personality styles.

The Psychasthenia scale of the Minnesota Multiphasic Personality Inventory (MMPI), scale 7, is often referred to as an obsessive compulsive measure; however, there is reason to believe that the Psychasthenia scale is more a general measure of neurotic characteristics than a specific measure of obsessive compulsive behavioral tendencies (Dahlstrom, Welsh, & Dahlstrom, 1972). Scale 3 of the MMPI is termed the Hysteria scale;

however, this scale is more a measure of conversion reactions than a real measure of hysterical personality characteristics per se (Slavney & McHugh, 1974).

One of the more promising measures of obsessive compulsive and hysterical characteristics is the Lazare-Klerman Trait Scale (LKTS) (Lazare, Klerman, & Armor, 1966, 1970). This is a factor analytically derived instrument that purports to measure obsessional, hysterical, and oral dependent personalities. This measure contains 140 true-false items that are scored into 20 trait scores. The 20 traits combine to three orthogonal factors which mirror closely obsessional, hysterical, and oral character traits. These character traits were defined from a review of the clinical literature and correspond closely to psychoanalytic descriptions of these personality patterns. Subjects used in the initial study (1966) consisted of 90 female psychiatric in-patients and out-patients. These patients were judged to be free of both organic impairment and acute psychoses, and to be nearly typical of at least one of the three psychoanalytic patterns.

Eight of the defining traits of the obsessive personality factor were correctly predicted from theory (orderliness, parsimony, rejection of others, emotional constriction, obstinancy, severe superego, rigidity, and perseverance) with loadings greater than .36. One

predicted obsessional trait (self-doubt) had a loading of only .12. Of the seven hysterical traits (emotionality, exhibitionism, egocentricity, sexual provocativeness, dependence, fear of sexuality, and suggestibility) all loaded significantly (.39 and above) with the exception of fear of sexuality and suggestibility (.10 and $-.08$, respectively). However, two traits not predicted (aggression and oral aggression) had significant loadings of .70 and .61, respectively.

In a subsequent study, Lazare et al. (1970) used a somewhat broader patient sample of consecutive female psychiatric in-patient admissions ($n = 100$) rather than preselected patients. The findings of the study were similar to the previous one with the exception that dependence failed to load significantly on the hysterical scale and obstinancy loaded significantly on the hysterical scale (.64) and not on the obsessive scale.

Another measure of obsessional characteristics is the Leyton Obsessional Inventory (Cooper & MacNeil, 1968; Cooper, 1970). This measure consists of 69 items and yields four scores (symptom score, trait score, resistance score, and interference score). The two intensity scales ("resistance" and "interference") were designed to tap the degree of resistance experienced by

the subject to the symptoms and extent of any interference with other activities. Each of the 69 items are typed on cards and the subject files the cards in a box to indicate a "yes" or "no" response. This measure was standardized on criterion groups of 17 obsessional patients, 25 house-proud housewives, and 60 normal women and 41 normal men. Highly significant differences between the groups were produced. Although this measure has not been subjected to a formal test-retest reliability study, Cooper reported a test-retest reliability estimate for the symptoms score and the trait score (.87 and .91, respectively). These estimates were obtained from data compiled by two separate researchers on a total of 30 patients; the time interval was not specified.

Sandler and Hazari (1960), in a study using a sample of 100 neurotic patients (approximately equally divided between males and females) factor analyzed responses to 40 items related to obsessive compulsive character traits and obsessional neurotic symptomatology. The items that loaded on the character trait dimension present a picture of a systematic and methodical person who enjoys a well ordered life, is consistent and punctual, and is meticulous in his use of words. Such individuals are disturbed by incompleting tasks and find interruptions in plans and

goal-directed activity irritating. These individuals pay much attention to detail and exhibit strong aversions to dirt. These characteristics are egosyntonic and are frequently viewed as a source of pride by their possessors. Unlike the obsessional traits, the obsessional neurotic's life is severely disrupted by the intrusion of unwanted and compulsive thoughts, by worry, doubt, and procrastination.

Such thoughts and impulses are experienced by the obsessional neurotic as egodystonic. The authors conclude that although the obsessive character and the obsessive neurotic occupy opposite ends of a continuum, this does not necessarily mean that subjects will show a mixture of both dimensions; nor does it necessarily imply that both do not share common dynamics and etiology.

The most widely used and best known measure of hysterical and obsessive traits is the Hysteroid-Obsessoid Questionnaire (HOQ) (Caine & Hawkins, 1963; Foulds, 1965; Hope & Caine, 1968). This questionnaire consists of a 48 item true-false self-rating form based on the assumption that hysterical and obsessional traits can be dichotomized along a single dimension. This measure is scored in an hysteroid direction and is designed to measure 11 traits considered to be characteristic of hysteroids or obsessoids.

In a study by Foulds (1965), the Hysteroid-Obsessoid Questionnaire was administered to 93 patients entering Forest and Orchard House Community Wards of Claybury Hospital during the period of December 1959 to February 1961. Of those rated hysteroid, 21 were females, and 6 were males; of those rated as obsessoid, 31 were female, and 34 were male. For 77 of these patients, a number of other test results were available. Foulds obtained a test-retest reliability for the scale of .77 (over a six week period).

Measures of internal consistency for traits or total scores are not reported. The mean score for those rated as hysteroid in personality was 27.08 with a standard deviation of 6.64, and the mean score for those rated as obsessoid in personality was 19.08 with a standard deviation of 4.20. The difference between the means was significant at beyond the .001 level. No sex difference was found in this study. The HOQ was also compared to the Hysteria scale and the Psychasthenia scale of the MMPI, but showed no significant correlation (-.14 and -.11, respectively). In the same study, 34 normal subjects (18 women and 16 men) were compared with neurotic subjects on both the HOQ and the Maudsley Personality Inventory E scores (which is a measure of extro-introversion). Significant correlations were obtained between these two measures for both

neurotics and normal (.84 and .81, respectively) which suggest that the HOQ is also a measure of extroversion-introversion. The mean score for normals on the HOQ was 24.07 with a standard deviation of 5.51.

The most recent validation study of the HOQ was carried out by Hope and Caine (1968). In this study, the HOQ was completed by 20 patients, 10 men and 10 women, in the neuroses unit of a mental hospital. These patients were also rated by three of their nurses, who made the ratings independently. The same three nurses each rated all 20 patients on an 11 point rating scale (one for each trait of the 11 measured by the HOQ). The validity coefficient, that is the correlation between the HOQ and the mean assessment of the three raters, was .78.

Barret, Calbeck-Meenan and White (1966) also compared the HOQ with the Maudsley Personality Inventory E scores (a measure of extroversion-introversion). Both scales were administered to 98 territorial army personnel. The HOQ and the Maudsley Personality Inventory Extroversion-Introversion scale were found to correlate significantly (.66). Hysteroids tended to score higher on extroversion with obsessoids scoring higher on introversion. Forbes (1969) administered the HOQ and Cattell's 16 PF Questionnaire to a mixed group of 58 neurotic and psychotic patients. Patients were

divided into two groups (either hysteroid or obsessoid) on the basis of their HOQ scores and then the two groups were compared on the 16 PF scales. The five scales which discriminated the groups significantly all contributed to the second order factor, extroversion, with the obsessoid group obtaining lower mean scores on these scales. The overall correlation between the HOQ and extroversion, as measured by Cattell's 16 PF Questionnaire, was .79. Thus it appears that the HOQ is not tapping any specific variance which is not measured by a test of extroversion-introversion with low scores on the HOQ (obsessoid direction) indicating introversion and high scores on the HOQ (hysteroid direction) indicating extroversion.

According to the personality model of Eysenck (1947, 1959, 1960), two orthogonal dimensions (i.e., neuroticism and extroversion-introversion) are used to account for the psychoneuroses. Eysenck views the hysterical character disorder as a disturbance of the neurotic extrovert and characterizes obsessive compulsive disorders as disturbances of the neurotic introvert. According to this paradigm, one would expect individuals classified as obsessoid to score significantly lower on the extroversion measures of Cattell's 16 PF Questionnaire than subjects classified as hysteroid. In a study by Eysenck and Eysenck (1964) comparing the

Eysenck Personality Inventory with the HOQ, obsessoid subjects score high on introversion while hysteroid subjects scored high on extroversion.

Kendell and DiScipo (1970) compared the Leyton Obsessional Inventory to the Eysenck Personality Inventory-Neuroticism Scale and found a correlation of .53. Paykel and Prusoff (1973), however, did not find a significant correlation between the Lazare-Klerman Trait Scale and the introversion-extroversion dimension of the Maudsley Personality Inventory of a sample of recovered depressed patients (n = 131). Moreover, Kline (1967), in a factor analytic study of the Sandler-Hazari measure of obsessional character traits and symptoms, found that the character traits did not load highly on a social introversion factor but that the obsessional symptoms did, with a loading of .51.

More recently, Magaro and Smith (1981); Magaro, Smith, and Pederson (1983); Miller and Magaro (1977); Pederson, Magara, and Underwood (1982); developed the Multivariant Personality Inventory (MPI) based on Shapiro's (1965) theory of neurotic styles and Horowitz's (1976) theory of personality style. This 96 item scale consists of eight subscales: the hysteroid, compulsive, character disorder, manic, depressive, paranoid, catatonic, and schizophrenic styles. In its development, the MPI subscales were compared to other

measures of specific traits which were considered to mirror the identifying characteristics of those various traits. According to Horowitz and Shapiro, the hysteric style is characterized by the use of the defense mechanism of repression, combined with the global, impressionistic cognitive and affective processes. These characteristics are considered to lead to a searching for outside direction and approval and are reflected in traits of suggestibility, romantic hopefulness, and the tendency to establish dependency relationships. Hysterics were thus predicted to be external on the locus of control scale (Rotter, 1966), altruistic on the altruism subscale of the philosophies of human nature scale (Wrightman, 1974), field dependent on the hidden figures test (Witkin, Lewis, Hertzman, Machoser, & Meisser, 1972), and hysterical on the Hysteroid-Obsessoid Questionnaire (Caine & Hawkins, 1963). This last prediction is equivalent to a prediction of extroversion.

The compulsive style is characterized by the tendency to overstructure incoming stimuli in response to strong needs for control and structure. This structuring is implemented by the compulsive's attention to detail and the technical aspects of the environment. These characteristics are seen by these authors as leading to self-doubt, introversion, and a desire for

self-sufficiency and independence. Compulsives were hypothesized to be internal on the locus of control scale, obsessoid on the Hysteroid-Obsessoid Scale, and low sensation seeking on the sensation seeking scale (Zuckerman, Kolin, Price, & Zoob, 1964).

These scales were administered to 95 introductory psychology students (57 females and 38 males) along with the Multivariant Personality Inventory. Factor analysis methodology was used to isolate clusters of male and female subjects who corresponded to the predicted hypothesized personality styles. Of female subjects, four of the five predictions for the hysteric style were supported for that cluster (N = 6). Externality, field dependence, altruism, and the thrill and adventure subscales of the sensation seeking scales were significantly elevated. In addition, the hysteric subscale of the Multivariant Personality Inventory also showed significant elevation. For the cluster corresponding to the compulsive style (N = 5), two (internality and introversion) of the three predictions were supported. In the male sample, none of the predictions for the hysterical style were supported. The cluster corresponding to the compulsive style (N = 4), however, was supported by one of the three predictions. The compulsive subscale of the Multivariant Personality Inventory was also significantly elevated for this

cluster. Test-retest reliabilities for the hysteric and the compulsive subscales of the Multivariant Personality Inventory were .70 and .72, respectively.

In a subsequent factorial validation study of the Multivariant Personality Inventory (Miller & Magaro, 1977), individuals who scored in the hysteric direction on the hysteric subscale also scored high on sensation seeking, low on dogmatism, as repressors on the repression-sensitization scale, high on altruism, as field dependent on the hidden figures test, and high on extroversion. Those individuals who scored in the compulsive direction on the compulsive scale also scored low on the sensation seeking scale, field independent on the hidden figures test, and as introverts.

More recently, Magaro, Smith, and Pederson (1983, in press) compared the Multivariant Personality Inventory to the Lazare-Klerman Inventory (Lazare et al., 1966) in another factorial study, using 100 female college students as subjects. The correlations between the factors corresponding to the compulsive, hysteric, and character disorder subscales of the Multivariant Personality Inventory and the factors corresponding to the obsessive, hysteric, and oral factors of the Lazare-Klerman trait scale were .73, .69, and .82, respectively. An attempt was also made to determine construct validity by assigning subjects to either

hysteric, compulsive, or character disorder groups by using factor scores from the analysis of the Lazare-Klerman and Multivariant Personality Inventory Subscales. These three groups were administered other personality measures and performance measures which were expected to differentiate between the three personality styles. The construct validity of the Multivariant Personality Inventory was not supported in this study.

The Multivariant Personality Inventory appears to show promise as a measure of Shapiro's (1965) theory of neurotic styles and Horowitz's (1976) theory of personality style. Magaro and Smith (1981) contend that the research has supported the reliability and concurrent validity of five of the eight subscales: hysteric, compulsive, depressive, manic, and character disorder. Construct validity for this instrument has yet to be demonstrated.

In a study by Segal (1961), an attempt was made to relate individual personality characteristics to career choices. Fifteen accounting students and 15 creative writing students were each administered the Rorschach and the Bender-Gestalt, and were also asked to write a brief one page vocational autobiography. Specific predictions were made concerning the contrast between personality styles of the accounting students and the

creative writing students. The results indicated that accounting students showed greater attempts at emotional control than creative writing students, while creative writing students showed more awareness of feelings and emotions. Accounting students also showed less tolerance for ambiguity and less ability to deal with complex emotional situations than creative writing students. They also exhibited signs of more rigid, fearful identification and less signs of overt hostility than creative writing students. These results, in regards to the accounting students, are somewhat consistent with Shapiro's (1965) description of the obsessive compulsive personality style.

Seik (1979) has also designed a measure to assess the four neurotic styles as described by Shapiro (1965) (obsessive compulsive, hysterical, paranoid, and impulsive), the Neurotic Styles Inventory (NSI). This measure is a paper-and-pencil questionnaire consisting of 100 items which are answered either true or false. Each of the four scales consists of 25 items and contains approximately an equal number of true-versus-false keyed items. The items are descriptive of the various aspects of each style (i.e., ways of thinking, experiencing emotions, behaving, and perceiving). Only items which were specific descriptors of each style, as

described by Shapiro, were included. Inferences beyond Shapiro's descriptions of these styles were not used.

In the process of developing the Neurotic Styles Inventory, an initial item pool underwent two revisions. The initial inventory, consisting of 160 items was administered to 242 male and female undergraduate students. Their responses to these items were analyzed and individual items were either retained or eliminated on the basis of item difficulty indices and subtest correlations. New items were added in order to measure traits no longer represented in the retained items. An attempt was also made to insure that the number of true-versus-false keyed items were approximately proportional. This revised inventory was then administered to 258 male and female subjects. Internal consistency, item subtest correlations, and corrected item subtest correlations were then calculated and items were chosen for the final instrument. The instrument was then administered to 192 female and 112 male subjects for the purpose of obtaining reliability and normative data for the final inventory. Three of the four scales showed internal consistency, reliabilities near .70 (impulsive .72, hysterical .70, and obsessive compulsive .67). The paranoid scale exhibited the lowest reliability .43. For both the obsessive compulsive and hysterical scales, the mean for female subjects was significantly

greater than for male subjects. On the obsessive compulsive scale, the mean for females was 15.08 and the mean for males was 14.18. The hysterical scale showed the greatest difference in means with means of 15.36 for females and 13.58 for males. The paranoid and impulsive scales did not show significant differences for male and female subjects. The intercorrelation between the obsessive compulsive scale and the hysterical scale of the NSI was $-.02$. The obsessive compulsive scale correlated in a significant positive direction with the paranoid scale ($.25$) and in a significant negative direction when compared to the impulsive scale ($-.49$). The hysterical scale correlated in a significant positive correlation with the impulsive scale ($.34$) and in a significant negative direction with the paranoid scale ($-.12$). The distribution of raw scores for all scales approximated the normal curve. The NSI and the Marlowe-Crowne Social Desirability Scale were both administered to 26 male and female subjects and nonsignificant correlations were reported.

Both construct and concurrent validity data for the impulsive scale of Seik's Neurotic Styles Inventory have been reported by Franklin (1982). A college student population ($n = 50$) was compared to a prison population ($n = 50$) on the impulsive scale of the NSI and the Psychopathic Deviate (Pd) scale of the MMPI.

Research indicates that prison inmates tend to obtain high scores on the Pd scale of the MMPI, which is indicative of impulsive and psychopathic behavior. It was therefore hypothesized that prison inmates would score significantly higher on both the Pd scale of the MMPI and the impulsive scale of the NSI than college students. It was also predicted that significant Pearson correlations would be obtained between the two measures.

As predicted, the prison inmates scored significantly higher on the Pd scale of the MMPI than did college students. Although the inmates' mean score on the impulsive scale of the NSI was higher than the students' mean score, this difference did not reach significance. The correlation for the entire sample between the Pd scale of the MMPI and the impulsive scale of the NSI was statistically significant (.45); however, the correlations between the impulsive scale of the NSI and the Psychopathic Deviate scale and Schizophrenia scale of the MMPI were the highest (.55 and .61, respectively). The author concludes, therefore, that the impulsive scale of the NSI and the Pd scale of the MMPI are most probably not measuring the same theoretical concept. This study provided some concurrent validity data for the NSI, but also left a

number of questions about what the scale is actually measuring.

Intercorrelations between the obsessive compulsive scale and the hysterical scale of the NSI and the correlations between these scales and the Hysteria and Psychasthenia scales of the MMPI were available from the author. The obsessive compulsive and hysterical scales of the NSI showed an intercorrelation for the 50 male and female college students of $-.02$ which was consistent with that reported by Seik (1979). The hysterical scale of the NSI did not significantly correlate with the Hysteria scale of the MMPI ($.19$), but did show a significant correlation when compared to the Psychasthenia scale of the MMPI ($.40$). The obsessive compulsive scale of the NSI showed a negative correlation, which approached significance, when compared to the Psychasthenia scale of the MMPI ($-.23$), and a significant negative correlation was shown between the scale and the Hysteria scale of the MMPI ($-.34$). These results are not what one would expect in that they suggest that the Psychasthenia scale of the MMPI and the hysterical scale of the NSI are measuring similar personality characteristics while the Hysteria scale of the MMPI and the obsessive compulsive scale of the NSI are measuring related characteristics. No explanation for these results can be offered except to point out that the NSI

was standardized using a normal student sample and the MMPI was standardized using a pathological sample. These results and past research suggest that the Psychasthenia and Hysteria scales of the MMPI are not appropriate scales for use in a validation study of the hysterical and obsessive compulsive scales of the Neurotic Styles Inventory.

Statement of the Problem

The Neurotic Styles Inventory appears to have some potential as a measure of Shapiro's constructs. Additional research is needed, however, prior to its clinical use. The purpose of this study is to investigate concurrent and construct validity of the obsessive compulsive and hysterical scales of the NSI.

Concurrent Validity

Because the Multivariant Personality Inventory (MPI) (Magaro & Smith, 1981; Magaro, Smith, & Pederson, 1983; Miller & Magaro, 1977) is also based on Shapiro's (1965) theoretical construct and exhibits good reliability and concurrent validity data for the compulsive and hysteric scales, the obsessive compulsive scale of the NSI will be compared to the compulsive scale of the MPI, and the hysterical scale of the NSI will be compared to the hysteric scale of the MPI. The Hysteroid-Obsessoid Questionnaire (HOQ) (Caine & Hawkins, 1963; Foulds, 1965), the most widely used and best known

measure of obsessive traits, will also be compared to the obsessive compulsive and hysterical scales of the NSI.

It should be noted that, unlike the scoring for the scales of the NSI, the lower the score on the MPI subscales, the higher the level of a particular personality style is indicated for a given individual. On the HOQ, low scores are indicative of obsessive compulsive characteristics and higher scores are indicative of hysterical personality characteristics. It is, therefore, predicted that the obsessive compulsive scale of the NSI will correlate significantly and in a negative direction with the compulsive scale of the MPI and the HOQ and that the hysterical scale of the NSI will correlate in a significant negative direction with the hysteric scale of the MPI and in a significant positive direction with the HOQ.

Construct Validity

An attempt will be made to provide construct validity data for the obsessive compulsive and hysterical scales of the NSI by comparing these scales to three groups of male and female college students: accounting students, theater students, and a control group consisting of freshman and sophomore undergraduate students.

According to Shapiro (1965), the personality style of the obsessive compulsive individual allows the individual to adapt to and even excel in intensive routine, technical work. Such individuals are typically found in fields such as engineering and accounting. This contention found support in Segal's (1961) study which compared the personality characteristics of accounting students to those of creative writing students. The personality characteristics of accounting students, as described in this study, were somewhat consistent with Shapiro's description of the obsessive compulsive personality style. One would, therefore, expect those individuals who have chosen to pursue the field of accounting to exhibit characteristics of the obsessive compulsive personality.

Shapiro (1965, pp. 119, 120) stresses the theatrical or play-acting quality of the hysterical personality. Hysterical individuals often express their emotions in a dramatic and exaggerated manner. Such qualities are generally viewed as adaptive in the theater; thus, one would expect actors to exhibit aspects of the hysterical personality style. This author was unable to obtain research for review that either substantiated or negated this contention.

It is hypothesized that:

1. Accounting students will obtain significantly higher scores on the obsessive compulsive scale of the NSI than the theater students and the control group.

2. Theater students will obtain significantly higher scores on the hysterical scale of the NSI than will accounting students and the control group.

3. A significant negative correlation will be obtained between the HOQ and the MPI compulsive scale.

4. A significant positive correlation will be obtained between the HOQ and MPI hysterical scales.

5. The accounting students will obtain significantly lower scores on the HOQ than will theater students and the control group.

6. The theater students will obtain significantly higher scores on the HOQ than will accounting students and the control group.

7. The accounting students will obtain significantly lower scores on the MPI compulsive scale than will theater students and the control group.

8. The theater students will obtain significantly lower scores on the MPI hysteric scale than will accounting students and the control group.

METHOD

Subjects

The subjects for this study were 115 college students (46 males and 69 females). They comprised three groups of 30 accounting subjects, 30 theater subjects, and 55 subjects who represented a control group. One hundred and one of these subjects were attending Appalachian State University, a medium-sized southern state university. Fourteen of the theater subjects were attending The University of North Carolina at Chapel Hill.

The 30 accounting subjects (17 males and 13 females) were either seniors or graduate students majoring in accounting. Their ages ranged from 21 to 34 with a mean age of 23.3. The 30 theater subjects (9 males and 21 females) were either seniors or graduate students majoring in theater. Their ages ranged from 21 to 35 with a mean age of 23.5. The 55 subjects of the control group (20 males and 35 females) were undergraduates enrolled in either introductory psychology classes or developmental psychology classes. Their ages ranged from 17 to 27 with a mean age of 20.5. The

subjects of the control group received extra course credit for participation in this study. Neither the accounting subjects nor the theater subjects received extra course credit for participation.

Procedure

The inventory packet consisted of the Hysteroid-Obsessoid Questionnaire, the Multivariant Personality Inventory, and the Neurotic Styles Inventory. These measures were counterbalanced to control for ordering effects. Each packet contained a cover sheet which gave general instructions for properly completing the packet. Each measure within the packet contained specific instructions concerning how responses were to be recorded. The inventory packet took between 50 and 75 minutes to complete. The inventories were distributed to the college students in class by the instructor, and participation in this study was voluntary. The instructors were advised to only distribute packets to either seniors or graduate students for both the accounting and theater students. The inventories were completed by the students on their own time and returned to the instructor. All answer sheets were hand-scored by this author.

Sixty inventory packets were distributed to control group students with a return of 55 completed packets. Forty inventory packets were distributed to

accounting students with a return of 30 completed packets. Sixty inventory packets were distributed to the theater students at Appalachian State University with a return of 16 completed packets. Due to the small size of the theater department at Appalachian State University, 60 packets were also distributed to theater students at The University of North Carolina at Chapel Hill, and 30 were distributed to the Drama Club at North Carolina State University (North Carolina State University does not have a theater department). Fourteen completed packets were returned from The University of North Carolina at Chapel Hill's theater department, and none were returned from North Carolina State University's Drama Club. Overall, 150 inventory packets were distributed to theater students with a return of 30 properly completed packets.

Pearson correlations were computed between the raw scores of all five scales for all 115 subjects: the obsessive compulsive and hysterical scales of the NSI, the compulsive and hysterical scales of the MPI, and the HOQ. An analysis of variance was used to examine differences among the three groups (accounting subjects, theater subjects, and control group subjects) and between female and male subjects for the entire sample for each scale.

RESULTS

It was hypothesized that the obsessive compulsive scale of the NSI would correlate significantly and in a negative direction with the compulsive scale of the MPI and the HOQ, and that the hysterical scale of the NSI would correlate in a significant negative direction with the hysteric scale of the MPI and in a significant positive direction with the HOQ. Secondary correlational predictions were that a significant negative correlation would be obtained between the HOQ and the MPI compulsive scale and that a significant positive correlation would be obtained between the HOQ and the MPI hysterical scale. The results are presented in Table 1.

As predicted, the obsessive compulsive scale of the NSI correlated significantly and in a negative direction with both the HOQ and the compulsive scale of the MPI ($-.28, p < .01$; $-.44, p < .001$, respectively). Low scores on both the HOQ and MPI compulsive scale indicate obsessive compulsive characteristics and a high score on the NSI obsessive compulsive scale indicates obsessive compulsive characteristics, therefore,

Table 1

Pearson Correlations and Probabilities Between
Scales (N = 115)

	NSI O-C	NSI H	MPI H	MPI C
NSI H	-.22 (.02)			
MPI H	-.05 (NS)	-.26 (.01)		
MPI C	-.44 (.0001)	.27 (.01)	.24 (.01)	
HOQ	-.28 (.01)	.18 (.05)	-.04 (NS)	.42 (.0001)

these results suggest that the NSI obsessive compulsive scale, the MPI compulsive scale, and the HOQ are measuring a similar personality dimension.

Also, as predicted, the hysterical scale of the NSI correlated in a significant negative direction with the hysteric scale of the MPI ($-.26, p < .01$) and in a significant positive direction with the HOQ ($.18, p < .05$). High scores on both the NSI hysterical scale and HOQ indicate hysterical characteristics and a low score on the MPI hysteric scale indicates hysterical characteristics, therefore, these results suggest that the NSI hysterical scale is measuring a similar personality dimension as both the HOQ and MPI hysteric scale. The obtain correlations are rather low, however.

The other correlational predictions of this study were partially supported. Although, as hypothesized, a significant negative correlation was shown between the HOQ and the MPI compulsive scale ($-.42, p < .0001$), a significant positive correlation between the HOQ and the MPI hysteric scale was not obtained ($-.04, NS$).

Other results included a significant positive correlation between the MPI compulsive scale and the MPI hysteric scale ($.24, p < .01$) and a significant negative correlation between the NSI obsessive compulsive scale and the NSI hysterical scale ($-.22, p < .02$). Although predictions were not made

concerning these comparisons, these results were unexpected.

An analysis of variance was used to examine differences among the three groups (accounting subjects, theater subjects, and control group subjects). These results are provided in Table 2.

As hypothesized, the accounting subjects obtained significantly higher scores on the obsessive compulsive scale of the NSI than either theater subjects or control group subjects ($F(5, 109) = 10.12, p < .002$, and $F(5, 109) = 5.87, p < .02$, respectively). However, no significant difference was shown between the theater subjects and the control group subjects on this scale.

It was also predicted that the theater subjects would obtain significantly higher scores on the hysterical scale of the NSI than the accounting subjects and the control group. The theater subjects did score significantly higher than the accounting subjects ($F(5, 109) = 5.76, p < .02$), but no significant difference was shown between the theater subjects and the control group. Although no prediction was made concerning the comparison between the accounting subjects' scores and the control group's scores on the hysterical scale of the NSI, the control group did score significantly higher than accounting subjects ($F(5, 109) = 4.43, p < .04$).

Table 2
F-Values and Probabilities for Comparisons Between (1) Accounting,
(2) Theater, and (3) Control Group Subjects and for Sex and Interaction
Between Sex and Group for Each Scale

	Groups		Groups		Sex	Sex/Group
	1 & 2	1 & 3	1 & 3	2 & 3		
NSI O-C	10.12 (.002)	5.87 (.02)	1.43 (NS)	1.61 (NS)	0.59 (NS)	
NSI H	5.76 (.02)	4.43 (.04)	0.39 (NS)	20.32 (.0001)	1.08 (NS)	
MPI H	0.05 (NS)	0.11 (NS)	0.33 (NS)	0.58 (NS)	0.11 (NS)	
MPI C	17.22 (.0001)	1.52 (NS)	12.17 (.0001)	2.56 (NS)	0.27 (NS)	
HOQ	4.71 (.03)	0.02 (NS)	5.48 (.02)	.22 (NS)	2.39 (NS)	

The predictions among the three groups for the HOQ, the MPI compulsive scale, and the MPI hysteric scale were partially met. The theater subjects did score significantly higher (in an hysterical direction) on the HOQ than the accounting subjects or the control group ($F(5, 109) = 4.71$, $p < .03$, and $F(5, 109) = 5.48$, $p < .02$, respectively). It was also hypothesized that the accounting subjects would obtain significantly lower scores on the HOQ than either the theater subjects or the control group; however, little difference was shown between these two groups.

Also, as predicted, the accounting subjects obtained significantly lower scores on the MPI compulsive scale than did theater subjects ($F(5, 109) = 17.22$, $p < .0001$), but no significant difference was shown between the scores for the accounting subjects and the control group for the scale.

The final hypothesis that the theater subjects would obtain significantly lower scores on the MPI hysteric scale than would accounting subjects or the control group was not supported by the results. The hysteric scale of the MPI did not significantly differentiate among any of the three groups.

Differences between male and female subjects for the entire sample for each scale were also examined along with interaction between sex and major. A

significant sex difference was shown for the hysterical scale of the NSI ($F(5, 109) = 20.32, p < .0001$), but not for the other scales. No significant interaction between sex and major was shown for any of the five scales. The mean scores for all five scales for both sex and major are shown in Table 3.

Table 3

Means for (1) Accounting, (2) Theater, and (3) Control
Group Subjects and for Males and Females for Each
Scale

	1	2	3	Male	Female
NSI O-C	17.13	14.00	15.04	15.87	14.95
NSI H	12.20	14.70	14.13	11.83	15.07
MPI H	32.00	32.40	31.45	32.48	31.42
MPI C	31.93	37.83	33.47	33.20	34.88
HOQ	25.67	28.90	25.84	26.28	26.80

DISCUSSION

The purpose of this study was to provide concurrent and construct validity data for the obsessive compulsive and hysterical scales of Seik's Neurotic Styles Inventory (NSI). These NSI scales were compared with the hysteric and compulsive scales of the Multivariate Personality Inventory (MPI) and the Hysteroid-Obsessoid Questionnaire (HOQ). All five scales were administered to either seniors or graduate students majoring in either accounting or theater (theater group and accounting group). They were also administered to undergraduates enrolled in either introductory psychology classes or developmental psychology classes (control group). Correlations among the five scales were examined, and an analysis of variance was used in order to examine differences among the three groups and between male and female subjects for the entire sample for each scale.

Concurrent validity was demonstrated for both the obsessive compulsive and hysterical scales of the NSI. Construct validity was also shown for the obsessive compulsive scale of the NSI in that the mean score for

the accounting group was significantly higher than the mean scores for both the theater group and the control group for this scale. Partial construct validity was demonstrated for the hysterical scale of the NSI. The mean score for the theater group was significantly higher than the mean score for the accounting group on the hysterical scale of the NSI. In addition, the accounting group's mean score for this scale was significantly lower than for the control group. Such results are not surprising in that one would expect accounting students to score in a less hysterical direction than undergraduate psychology students.

It was also predicted that the NSI hysterical scale would differentiate between the theater subjects and control subjects with the theater subject producing a significantly higher mean score than controls. However, neither the hysterical scale nor the obsessive compulsive scale of the NSI differentiated between these two groups. Such results may either indicate the presence of a sampling error in regards to the theater subjects and control group, i.e., there is little or no difference between these two groups in regards to either hysterical or obsessive compulsive personality styles, or that neither of the NSI scales are sensitive enough measures to significantly differentiate between these groups. A significant sex difference was shown

for the NSI hysterical scale. This would indicate that the increased number of female subjects in the control and theater groups (30 males and 35 females; 9 males and 21 females, respectively), when compared to the approximately equal number of male and female subjects in the accounting group (17 males and 13 females), contributed to the failure of the hysterical scale to differentiate between the control and theater group while showing a significant differentiation between these groups and the accounting group.

It may well be that some degree of sampling error may be present in this study due to the fact that the inventory packet took between 50 and 75 minutes to complete, and 150 inventory packets were distributed to theater students for a return of only 30 properly completed packets. The completion of such a long questionnaire is a tedious undertaking, and most hysterical individuals would not comply, especially if, as in this case, they received no reward for doing so (such as extra course credit). Also, some students who major in theater concentrate in either set design or directing, neither of which would necessarily imply the presence of hysterical qualities. No attempt was made in this study to differentiate between theater students involved primarily in set design or directing and those whose major concentration was in acting. This may

suggest that most of the truly hysterical theater students were precluded from the sample.

The presence of a sampling error in regards to the theater subjects and control group cannot, however, account for the results obtained for the MPI compulsive scale and the HOQ. Unlike the NSI scales, both the MPI compulsive scale and the HOQ produced significantly higher mean scores for theater subjects than for either accounting subjects or control subjects. Neither of these scales, however, significantly differentiated between accounting subjects and controls. For these reasons, a more reasonable explanation for the results of this study may be that the MPI compulsive scale and the HOQ are more sensitive measures of the hysterical personality style than the obsessive compulsive style, while the NSI scales are more sensitive measures of the obsessive compulsive style than the hysterical personality style.

An unexpected finding in this study was the significant negative correlation between the NSI hysterical scale and the obsessive compulsive scale. Seik (1979) did not report a significant correlation between these scales which would suggest that these scales consist of two nonrelated personality dimensions. The present study suggests that obsessive compulsive and hysterical personality styles are related in that a low

score on the NSI hysterical scale may indicate the presence of compulsive characteristics and vice versa. This is, indeed, the premise on which the HOQ is based, i.e., the assumption that hysterical and obsessional traits can be dichotomized along a single dimension (Caine & Hawkins, 1963). Also, in Seik's study, a sex difference was found for both the hysterical and obsessive compulsive scales of the NSI. In the present study, a sex difference was found for the hysterical scale of the NSI, but not for the obsessive compulsive scale. This finding is somewhat predictable in that historically descriptions of the hysterical style have represented a caricature of femininity (Shapiro, 1965). No adequate explanation can be offered at this time which would account for the differences between these results and those obtained in Seik's study.

Overall, the correlations between scales in this study were low. The highest correlations were obtained between the MPI compulsive scale and the NSI obsessive compulsive scale and the MPI compulsive scale and the HOQ. The MPI compulsive scale also showed the highest differentiation between groups, especially between accounting subjects and theater subjects with accounting subjects scoring in a more obsessive compulsive direction, and theater subjects and control group subjects with control subjects scoring in a more obsessive

compulsive direction. No significant differentiation was shown between accounting subjects and control subjects on the MPI compulsive scale. Another unexpected finding was the low positive correlation obtained between the MPI compulsive scale and the MPI hysterical scale. This would suggest that these two scales are tapping, to a certain degree, the same personality dimensions. Correlations between the MPI compulsive and hysterical scales are not reported in the literature, and this author can offer no adequate explanation which would account for this finding.

The MPI hysteric scale exhibited the lowest correlations when compared to the other scales in this study, and also did not significantly differentiate between any of the three groups. In addition to the unexpected significant positive correlation between the MPI hysteric scale and the MPI compulsive scale, the MPI hysteric scale failed to correlate significantly and in the predicted direction with the HOQ.

The HOQ correlated significantly and in the predicted direction with all scales except the MPI hysteric scale. The HOQ showed the highest correlation with the MPI compulsive scale and also differentiated significantly between the same groups as did the MPI compulsive scale.

Overall, the NSI obsessive compulsive scale correlated significantly and in the predicted direction with the MPI compulsive scale and the HOQ. This scale also showed an unexpected negative correlation with the NSI hysterical scale, but failed to show a significant correlation with the MPI hysteric scale. This scale differentiated significantly between the accounting and theater subjects and the accounting subjects and control group but did not significantly differentiate between the theater subjects and control group subjects.

The NSI hysterical scale correlated significantly and in the predicted direction with the MPI hysteric scale, the MPI compulsive scale, and the HOQ. This scale showed a significant negative correlation with the NSI obsessive compulsive scale and was the only scale to show a significant sex difference. Although the NSI hysterical scale significantly differentiated between the same groups as did the NSI obsessive compulsive scale, the distribution of male and female subjects among groups may have contributed significantly to these results.

Further validation studies are needed for both the obsessive compulsive and hysterical scales of the NSI. There are currently no existing scales which have shown strong validity as measures of either of these personality styles and with which new measures of these

styles can be compared. Because of this problem, this author suggests that future research with the NSI hysterical and obsessive compulsive scales place an emphasis on obtaining sound construct validity data. Unfortunately, construct validity data are difficult to obtain for measures of obsessive compulsive and hysterical styles because it is difficult to isolate groups of subjects which are representative of these two styles. It is suggested that validation studies for the obsessive compulsive and hysterical scales of the NSI use nonstudent subjects, i.e., a theater group, actors only, could provide subjects which would represent the hysterical group, and certified public accountants or engineers could be sampled to represent the obsessive compulsive group. This would possibly increase the likelihood of obtaining more extreme scores in each of these groups and, hopefully, decrease the probability of a sampling error. Also, because of the sex difference shown in regard to the NSI Hysterical Scale, greater care should be taken to insure a more even distribution of male and female subjects within groups.

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APPENDIX A

Packet Cover Sheet

PACKET COVER SHEET

I.D. Number _____ Sex M F AGE _____

Major: _____ GPA _____

1. Please use separate answer sheets for each questionnaire. (Do not mark answers on questionnaires.)
2. Use a #2 pencil.
3. Do not fill in name on answer sheets. Place your I.D. number in space marked "IDENTIFICATION NUMBER" and indicate whether you are a male or female on each answer sheet.

Thank you for participating in
this study.

APPENDIX B

Hysteroid-Obsessoid Questionnaire

Hysteroid-Obsessoid Questionnaire

Instructions: Read over each question and decide whether it is a true description of how you usually act or feel, then put a circle around the T (true) if the statement describes you or around the F (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 questions. There are no right or wrong answers.

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| 1. I find it hard to think up stories. | T | F |
| 2. I like to wear eye-catching clothes | T | F |
| 3. I keep my feelings to myself | T | F |
| 4. I am slow in making up my mind about things because I weigh up all the pros and cons | T | F |
| 5. I am a moody sort of person, with lasting moods | T | F |
| 6. I have rigid standards I feel I should stick to | T | F |
| 7. When I am working I like a job which calls for speed rather than close attention to details | T | F |
| 8. I like to ask for other people's opinions and advice about myself | T | F |
| 9. I don't feel awkward when meeting people because I know how to behave | T | F |
| 10. I prefer to be popular with everyone than to have a few deep lasting friendships | T | F |
| 11. I cannot shake off my troubles easily even if I get the opportunity | T | F |
| 12. I have a good imagination | T | F |
| 13. I keep quiet at parties or meetings | T | F |
| 14. I feel better after I've had a good row and got it off my chest | T | F |

- | | | | |
|-----|---|---|---|
| 15. | I am quick in sizing up people and situations | T | F |
| 16. | My mood is easily changed by what happens around me | T | F |
| 17. | My conscience seldom bothers me | T | F |
| 18. | I keep a place for everything and everything in its place | T | F |
| 19. | I'm rather lacking in the social graces | T | F |
| 20. | I have the same friends now as I had years ago | T | F |
| 21. | It pleases me to be the centre of a lively group | T | F |
| 22. | I like to show people exactly how I feel about things | T | F |
| 23. | The first impressions or reactions are usually the right ones in the end | T | F |
| 24. | I do not mind if things turn out badly as long as I know I've done the right thing | T | F |
| 25. | I can lead more than one life in my imagination | T | F |
| 26. | I like discussing myself with other people | T | F |
| 27. | I do not show my emotions in front of people | T | F |
| 28. | When someone asks me a question I give a quick answer and look for the reasons later | T | F |
| 29. | If I am not in the right mood for something it takes a lot to make me feel differently | T | F |
| 30. | I usually get by without having to worry about whether I've done the right thing morally or not | T | F |

- | | | |
|---|---|---|
| 31. One can understand most things without having to go into all the details | T | F |
| 32. It is important to be fashionable in your opinions, clothes, etc. | T | F |
| 33. My party manners are pretty good | T | F |
| 34. The only friends I make I keep | T | F |
| 35. If I happen to be upset about something it seems to carry over into all I do for a long time | T | F |
| 36. I cannot completely lose myself in a book or story | T | F |
| 37. I like to sit in the background or in an inconspicuous place at socials, meetings, etc. | T | F |
| 38. I act out my feelings | T | F |
| 39. I wait until I am sure of all my facts before I make a decision | T | F |
| 40. I spend a good deal of time worrying about the rights and wrongs of conduct | T | F |
| 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 | T | F |
| 42. When meeting people I haven't met before I usually feel I make a rather poor impression | T | F |
| 43. It upsets me to leave friends and make new ones even if I have to | T | F |
| 44. When watching a play I identify with the characters | T | F |
| 45. My feelings about things and towards other people seldom change | T | F |
| 46. I do not like taking a leading part in group activities | T | F |

47. Mistakes are usually made when
people make snap decisions T F
48. If two people find they disagree
about things they shouldn't try
to carry on being close friends T F

APPENDIX C

Multivariant Personality Inventory

Multivariate Personality Inventory

Test 1, Interest Inventory, Form 5

Instructions: We are interested in how the following list of statements relate to you personally, not to people in general. Mark on the answer sheet the degree to which each statement expresses your own feelings or beliefs. If the expression:

Applies very much to you - Mark 1
Applies much to you - Mark 2
Applies somewhat to you - Mark 3
Applies little to you - Mark 4
Applies very little to you - Mark 5

1. I have no enemies.
2. I don't care if my room is a little messy.
3. My best defense is attack.
4. I never have an urge to do anything harmful or shocking.
5. I always try to conform to the ruling powers.
6. I often wonder if people are talking about me behind my back.
7. You can learn a lot about something by just staring at it.
8. Oftentimes I laugh when nothing funny is occurring.
9. What others think about me is very important to me.
10. My highest goal is to be a rational person.
11. I was good at getting my own way as a child.
12. At times my thoughts have raced faster than I could speak them.
13. Religion is the highest authority.
14. People often betray their true feelings by seemingly insignificant words or gestures.

15. A very simple life makes for pureness of self.
16. Most any time I would rather sit and daydream than do anything else.
17. My main goal in life is to find someone who really loves me.
18. Clear rational thinking is our greatest moral obligation.
19. I don't get a kick out of outsmarting other people.
20. When bored I like to stir up some excitement.
21. I do not believe in the second coming of Christ.
22. I feel sure that I have been often punished without cause.
23. I would like to have perfect control over my body.
24. I have had many peculiar and strange experiences.
25. It is important to be fashionable in your opinions, clothes, etc.
26. I keep a place for everything and everything in its place.
27. When I was young I was cuter than other children.
28. Without new projects to accomplish, life sometimes seems meaningless.
29. Man on his own is a helpless and miserable creature.
30. The person who is deviant may be right.
31. We all can find a way back to our oneness through nature.
32. At times I hear so well it bothers me.
33. My friends are the most important thing in the world to me.
34. Some people tell me I'm overly neat.
35. I managed to get a lot of presents as a child.

36. I rarely become very excited.
37. A person who does not have some great cause or belief has not really lived.
38. I never seem to get any of the breaks in life.
39. One of my goals is to combine the physical and mental worlds.
40. I sometimes feel as if things I see or hear are not quite real.
41. One can understand most things without having to go into all the details.
42. I do not show my emotions in front of people.
43. The best way to handle people is to tell them what they want to hear.
44. Life is full of new challenges.
45. It is only when a person devotes himself to an ideal or a cause that life becomes meaningful.
46. I believe I have special qualities that others do not have.
47. I like to be in complete control of the smallest movements of my body.
48. I don't understand anything at all about some parts of my body.
49. I would rather not hear about something bad, even if it might be important.
50. I like to organize things logically before acting.
51. People have often said that I'm too selfish.
52. I am very good at organizing large events.
53. In a just society everyone obeys the law.
54. I would like to have more of an influence on the people around me.
55. One of the most beautiful of the arts is the human body in graceful motion.

56. Often I can't seem to understand why people do the things they do.
57. I am a romantic person.
58. Mistakes are usually made when people make snap decisions.
59. Never tell anyone the real reason you did something unless it is useful to do so.
60. People often tell me that I'm blessed with the 'gift of gab'.
61. Every person should have complete faith in some supernatural power whose decisions he obeys without question.
62. Institutions can really crush you if you are not careful.
63. There is a complete spiritual unity beyond the material world.
64. Often I hear something that I can't identify.
65. If I could find someone to love, I would be much happier.
66. I don't waste time trying to keep things organized.
67. If you want to get as much as you can from a situation, you've got to be sharp, and not trust other people too much.
68. Other people seem slow and dull to me sometimes.
69. There are two kinds of people in the world; those who are for the truth and those who are against it.
70. Most people don't realize that our country is being manipulated by secret groups.
71. A supreme force seems to exist in all things around me.
72. I pay more attention to the texture of something rather than what it looks like.

73. My physical problems are a concern to me.
74. Anything can be understood and explained logically.
75. The most important thing in life is winning.
76. My greatest asset is the speed with which I can accomplish things.
77. Everyone should recognize a higher authority than himself.
78. Even when people are helping me I often times feel they have ulterior motives.
79. I feel that I am one with all the things which surround me.
80. Things often don't seem to fit together for me.
81. People I care about sometimes hurt me without knowing it.
82. I seem to have little control over events in my life.
83. If I can spot a person's weaknesses, I can usually get what I want from them.
84. When I really get going I can bulldoze my way through most obstacles.
85. It's foolish to join a group if you can't pledge your loyalty to that group.
86. It is a good idea to be careful of people who are too friendly too soon.
87. My life shall take the course it was predestined to take.
88. The world doesn't make sense.
89. It is easy to get carried away by your feelings.
90. People should gather a lot of information before they make a decision.
91. I think most people who don't get what they really want, are too concerned with rules, etc.

92. I have periods when I am able to do anything I want.
93. The only way to know who you really are is to find others who think and feel as you do.
94. Strong emotional attachments can increase your vulnerability.
95. It is possible that we have lived before at another time.
96. I often feel that I perceive things much differently than people.

APPENDIX D

Neurotic Styles Inventory

Neurotic Styles Inventory

This inventory consists of numbered statements. Read each item and decide whether the statement is true or false as it pertains to you personally. Remember to give YOUR OWN opinion of yourself. Do not leave any blank spaces if you can avoid it.

1. If I had my choice, I would prefer a career as an artist over a career in engineering.
2. I hardly ever get embarrassed.
3. I am generally aware of several alternatives in a situation and am able to make a choice between them.
4. I often end up doing things that I really don't want to do.
5. When I have free time, I like to plan ahead so that I get the most relaxation into the little time I have.
6. I rarely press myself to fulfill unending duties, responsibilities, and tasks.
7. I am generally relaxed and comfortable when I am around people who have authority over me (boss, teacher, etc.).
8. Sometimes I overreact to situations.
9. Generally when people around me have hidden motives I don't realize it until someone else points it out to me.
10. I am not easily influenced by others' opinions about things.
11. I am less tender and sentimental than most people of my sex.
12. Irresistible temptation is no excuse for quick unthinking actions.
13. As a rule, I don't produce much in the way of work.
14. Occasionally I wonder if I'm not too strict with myself.

15. I am almost never disappointed by other people.
16. I'm not concerned about how I appear to others.
17. Most people will dominate you if you allow them to.
18. I am a laugher; a giggler; a chuckler.
19. I am usually described as having "good judgment."
20. Many people I know tend to be so naive and trusting that they often "get taken in" by others.
21. I usually plan my day ahead, rather than do what comes up.
22. I rarely do things without knowing why.
23. I get my feelings hurt quite easily. I guess I'm just too sensitive.
24. I find it difficult to concentrate on what I am doing.
25. I trust my thoughts rather than my feelings when making an important decision.
26. I can usually be counted on to stir up some excitement.
27. My life is centered around my work, be it job or school.
28. When I notice something new or different about a person's personality I am not satisfied until I understand how I missed it in the first place.
29. I critically examine different aspects of a situation.
30. While working on a problem, I have a tendency to worry over details that sometimes seem insignificant.
31. In most social groups there are one or two people "in charge" and everyone else are like docile sheep.
32. I am more romantic than most people.

33. I often act on hunches or first impressions.
34. I tend to learn and remember a great deal of factual information.
35. I would like to have a job which required attention to much technical data.
36. I am generally concerned about the moral significance of my behavior.
37. I can size up a situation more quickly and accurately than most people.
38. I have often gone ahead with plans that I knew would probably not work out.
39. I am most comfortable when I'm aware of my "role" (e.g., worker, student) and am able to behave accordingly.
40. Sometimes I'm so unaware of what's going on around me that people think I'm spacey.
41. I can generally postpone immediate satisfaction when it would interfere with long-term goals.
42. I'm really not too efficient when it comes to getting work done.
43. I have frequently done things that I didn't really mean to do.
44. I would like to be hypnotized.
45. I feel things more intensely than most other people.
46. I often find myself in trouble.
47. I take pride in the fact that I have a clearly defined purpose which guides my life.
48. I am quite sensitive to the meanings hidden behind a glance, a comment, or certain nonverbal behavior.
49. If I had to summarize my attributes in one phrase, it would be "will power."
50. The course of my life has seemingly been determined by accidental or external circumstances.

51. In contemplating a task, I seldom pay attention to detail.
52. I tend to respond quickly and intensely to persons and things in my environment.
53. Other people have a tendency to get me into trouble.
54. Even in insignificant acts, I can see moral or ethical implications.
55. I keep a lot of my ideas to myself.
56. Theories and opinions are more interesting to me than facts.
57. I am struck by the colorful things in life.
58. I'm good at making and carrying through with long-term plans.
59. I can concentrate for long periods of time on intellectual tasks.
60. When I sit down to relax, I get anxious because I feel like I'm wasting time.
61. My interests and goals tend to be short-lived.
62. I feel humiliated when I "give in" to the desires of someone else.
63. I have definite reasons for acting in the ways that I do.
64. I am a playful person.
65. I hardly ever get "turned on" to popular new styles.
66. Subjective impressions are usually more important than objective facts.
67. I am almost always vigilant (very aware of everything that is going on around me).
68. Just because it's my duty, doesn't mean I'll necessarily do it.

69. I tend to see the advantages of a situation and to ignore the drawbacks and complications.
70. It is very seldom that I slip and reveal something to others that I don't want them to know about me.
71. In general, I feel "driven" by some "invisible force" to perform at my maximum.
72. I am a spontaneous person and occasionally even surprise myself with things that I do.
73. People rarely say that I'm too emotional.
74. I generally don't feel under pressure.
75. I have seldom fallen in love.
76. I occasionally "get lost" in a sensual experience.
77. Friends consider me to be stubborn and usually are unable to change my mind about things.
78. Usually, rather than take a break, I would rather press on and complete whatever I'm doing.
79. I rarely consider morality, logic, and/or social customs when making decisions.
80. I feel somewhat obligated to tell the truth.
81. I am most comfortable when I'm working.
82. When reading the paper, I usually just skim the headlines.
83. I'm often described by my friends as "impulsive."
84. Sometimes people tease me for being so naive.
85. Sometimes I feel like I can't control myself.
86. When I change clothes, I let the ones I take off lay where they fall until I get around to picking them up if I do at all.
87. I really go by first impressions of people.

88. If somebody doesn't like me or is trying to use me, I sometimes don't even notice it until someone else points it out to me.
89. I have few interests, values, and goals.
90. Most people consider me to be quite open minded.
91. Sometimes I'll think about a problem for hours or days, trying to come up with the right decision.
92. I really enjoy unpredictability in people and am often pleasantly surprised when someone does something I don't expect.
93. Sometimes I just run my mouth and say everything that comes into my head.
94. Sometimes it seems that if you allow yourself to care for somebody they will use this against you.
95. My train of thought is easily interrupted or distracted.
96. I dislike fads.
97. I find it easy to lie, especially when it's in my best interest to do so.
98. Maintaining your independence from the designs and desires of those around you requires perpetual alertness.
99. I generally say, "I want..." rather than "I should...."
100. I'm a sentimental fool.

VITA

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