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AN ANALYSIS OF THE DIFFERENCES IN COGNITIVE STYLES
AND LEVELS OF FUNCTIONING BETWEEN TWO PERSONALITY
TYPES

by

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Honours B.A., University of Windsor, 1973

A Thesis
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ABSTRACT

The relationship between levels of cognitive functioning and personality type was investigated in the present study - with the hypotheses that those individuals maintaining an obsessive-compulsive style would function significantly more often at the abstract level; while those individuals maintaining a hysterical style would function significantly more often at the functional and concrete levels (Hypotheses I and II). Sixty subjects, thirty with obsessive-compulsive trends and thirty with hysterical trends, were selected on the basis of their scores on the HY and PT scale, along with their overall profile on the Minnesota Multiphasic Personality Inventory. These subjects were then administered the Wechsler Adult Intelligence Scale and their verbal responses to the Vocabulary subtest scored using a qualitative coding scale developed by A.A. Surkis (1963). Results indicate statistical significance in the predicted direction so that individuals with obsessive-compulsive trends do function at an abstract level cognitively, significantly more often than individuals with hysterical trends - these individuals functioning significantly more often at the functional and concrete level (Hypotheses I and II). Further, these results are in direct support of the theoretical formulations of Klein and Gardner (1954, 1959) and Shapiro (1965), indicating that individuals with similar personality styles do utilize similar modes of reaction, cognitive apparatuses, thinking processes, and learning patterns.

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Sometimes, not often enough
we reflect upon the good things.
And those thoughts always center
around those we love.
And I think about those people
who mean so much to me.
And for so many years have
made me so very happy.
And I count the times I have
forgotten to say, Thank You,
And just how much I love them.

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CHAPTER I

INTRODUCTION

Throughout the ages man, in pursuit of the absolute, and indirectly his security and sense of adequacy, has become actively involved in establishing methodical and systematical arrangements. As a result of the persistence in this endeavor, any single entity, animate and inanimate, within man's conceptual grasp - the universe - has both a Phylum, i.e., broad and basic divisions and a Phylogeny, a racial history or evolutionary development. And this process of segmenting, compartmentalizing, and classifying has proved beneficial in all cases except one - the case of man himself, where unfortunately the result has been rather to confuse than clarify.

The confusion becomes obvious, not so much in relation to the tangible or physical boundaries of mankind, where certainly there have been a profuse number of successful attempts at classification, but rather confusion in relation to the metaphysical components of mankind - of exclusive concern and interest herein - the development and etiology of personality patterns, of character prototypes, of styles or modes of functioning.¹

¹For the purpose of this presentation, the terms personality, character, trend, and style shall be equated and carry the same significance.

Conceptualizations Regarding Character

To date, there has been a great deal of confusion and speculation regarding the concept of character, and certainly extensive literature devoted to this issue is an expression of this. For not only is the reader confronted with a panorama of interpretations and translations at a descriptive level, but also further fractures and ruptures representing the various schools of psychological thought. Within the classical psychoanalytic framework, for example, character represents a habitual and relatively constant reaction, reflecting the specific combinations and associations which the ego institutes in venturing to find a satisfactory solution to the conflict between instinctual demands and environmental forces. (Simon Nagler, 1967.) Sigmund Freud (1900) seems to mention the term 'character' for the first time in 'The Interpretation of Dreams'. Freud states:

"What we describe as our 'character' is based on the memory traces of our impressions; and moreover, the impressions which have the greatest effect on us - those of our earliest youth - are precisely the ones which scarcely ever become conscious."

This statement seems to be a forerunner of a structural conception of character. In keeping within the framework of Freud's libido theory, Wilhelm Reich (1933) established several theoretical contributions with regard to character. In defining the concept of character, Reich speaks in terms of a protective element for the ego, against both instinctual forces within and without the world. As such, character becomes a defensive structure utilized in an effort

to resolve conflict of this type. That 'character structure is the crystallization of the sociological processes of a given epoch', was directly stated by Reich. Further mileage in this direction by Eugene Brody and Lindbergh Sata (1967) confirmed that, intrinsic to the concept of character, is the notion involving the "ego"s' habitual mode of bringing into harmony the task presented by internal demands and the external world. Exactly when and how the ego acquires the qualities which enable it to accommodate and adjust, first to the demands of the instinctual drives and of external reality, and later to the demands of the superego could be the subject of another treatise.

According to Fenichel (1946) character constitutes a reflection of the individual's entire historical development, including the characteristic types of combining the ego, id, and superego with one another. There is, inherent in this formulation, an element of adjustment or conciliation, so that character attitudes become compromises between instinctual drives and forces of the ego. Gordon Allport (1960) puts it another way. He states:

"A personal style is a way of achieving definiteness and effectiveness in our self image and in our relationships with other people. It evolves gradually by our adopting a consistent line of procedure and sticking to it... Style is the stamp of individuality impressed upon our adaptive behaviour."

For the purpose of this thesis, in an effort to maintain restrictions regarding the manifold conceptualizations of character,

and to establish an operational definition, David Shapiro's (1965) exposition of character or 'style' shall be adopted herein. In his introduction of 'Neurotic Styles', he begins by saying:

"Let me explain what I mean by 'neurotic styles'. By 'style' I mean a form or mode of functioning - the way or manner of a given area of behaviour - that is identifiable, in an individual through a range of specific acts. By 'neurotic styles' I mean those modes of functioning that seem characteristic, respectively of nervous neurotic conditions. I shall consider here, particularly ways of thinking and perceiving, ways of experiencing emotions, modes of subjective experience in general, and modes of activity."

Clearly then, a particular style becomes the individual's idiosyncratic means of reacting or behaving so that a consistency prevails in his mode of functioning which is and can be identified as such.

Variations Within the Conceptualization of Character

The latter definition, given by Shapiro not only takes into consideration the intrinsic concept of style, - a mode of functioning, but also emphasizes that indeed there can and are several styles, several modes of functioning. And Shapiro adds that:

"A manner or a style of functioning is not always easy to identify. We are usually inclined to pay attention to the content of a communication or an act, and noticing its manner requires a different, perhaps in some respects more passive sort of attention."

If one were to notice the manner of a particular style, it could be said that essentially what occurs, is that instead of reacting to experiences adequately, a particular individual may respond more or less rigidly with the same reaction pattern. In another sense, a certain consistency or congruency prevails in the path which the ego chooses for solving its tasks, so that a predominant pattern or mode of functioning is established. By selecting a specific pathway, the ego not only protects the organism, it also reacts. In this way the ego reacts much the same as an ongoing sifting process, organizing stimuli and impulses, permitting some of these to find expression directly, and others, in a somewhat altered form. The end result of such a process is the distortion of character, which develops early in life, and persists as a person's style, as the characteristic way in which he copes with his environment and defends himself.

In keeping with a fundamental trait of mind, the tendency has been to lump individuals with similar reaction patterns, into general classes or types. The implication thus arises that to study an individual style or a particular aspect of that style, one must somehow be able to encompass it, to codify or categorize it. An almost infinite variety and range of categories might be chosen for such an endeavor. And while the description of character types or styles becomes rather confusing, attempts have been made. For example, the psychoanalytic characterology started with the investigation of neurotic symptoms, that is, with phenomena that are ego-alien and do not fit into the character, the customary mode of behaviour (Fenichel,

1946). With such symptoms, the individual has occurrences or experiences which are strange and unintelligible. The impression of a something that seems to break in upon the personality from an unknown source - a something that disturbs the continuity of the character and is outside the realm of the conscious will, is created. The end result may be an adult who always seems to be inhibited in certain areas of functioning, or who show exaggerations of certain styles or reaction patterns. Cameron (1963) suggests that if such an individual, and those who are close to him, accept his peculiarities as simply his nature, he is not likely to find them disturbing or seek to change them. He may be proud of them in fact, and consider characteristics not incorrectly, as signs of his individuality.

Critical Review of the Literature

Sigmund Freud himself was absorbed within a system of distinctions concerning the organization and etiology of personality. One of the most significant and relevant contributions which Sigmund Freud made to characterology, and perhaps the best known, is found within his paper on 'Character and Anal Erpticism' (1908). Freud recognized certain traits, that is, obstinacy, orderliness, and parsimoniousness, and clearly associated these traits with the concept of anality and with pleasures derived from withholding or expelling feces. After discussing this type of character in length, Freud states:

"One ought to consider whether other types of character do not also show a connection with the excitability of particular erogenous zones."

Similarly, in 'Libidinal Types', (1932), Freud remarks that:

"Whoever undertakes the justifiable task of differentiating separate types...[is] free to select the distinguishing characteristics and principles which shall determine this classification; the more promising and valuable would be those of a regular association of physical and mental characteristics."

In addition, and in accordance with the id, ego, and superego, Sigmund Freud proposed three main libidinal types - the erotic; the narcissistic; and the compulsive type. The distinguishing features of these types depended on the predominance of the investment of libido in the provinces of mental apparatus [the id, the ego, the superego]. Freud himself, however, never systematically formulated a comprehensive listing of character variations.

Concurrently, other investigators began to be concerned about certain contentions regarding character and, especially in the beginning, followed Freud's general approach of studying character features within the theoretical framework of libidinal development. Of particular importance there are the contributions of Sadger (1910) and of Jones (1923). Both of these investigators elaborated on the theory of the anal character, the latter focusing his attention on characterizing two anal types - the advantageous and the disadvantageous. According to Jones, a particular individual stood out roughly as 'advantageous' due to his competency, determination, generosity, orderliness, patience, power of organization, reliability and thoroughness; while the 'disadvantageous' qualities might consist of

hypochondria, irritability, miserliness, obstinacy, and tyrannizing inclinations.

The most elaborate of the psychoanalytic attempts at segmentation and classification was formulated by Karl Abraham (1924, 25, 27). The outcome of such formulations was a division of people into essentially two types - an early oral-erotic type and a later oral-sadistic type. The individual classified within the first type, i.e., oral erotic, was conceived of as continuing to seek out oral gratification in a variety of ways, this continuing throughout all the stages of their development. Consequently, these people could be cast as receptive, communicative, bright, and sociable. In addition, the oral-erotic character could be subdivided into healthy oral-eroticism and neurotic oral-eroticism. The first would be synonymous with the traits of ambition, inquisitiveness, generosity, and acquisitiveness; while corresponding neurotic oral traits include a morbid desire for food, avaritia, impatience, restlessness, and morbid perseverance. The latter stage, the oral-sadistic type can be viewed as a 'cannibalistic' phase which is marked by malicious biting, attacking, and devouring attitudes, along with moods of hostility and dislike, envy and jealousy.

Up to this point in the history of psychoanalysis, the development and conceptualizations regarding character, evolved around the framework of genetic relationships among certain character traits and the formulations involving libidinal stages and modes. It was not until the work of Wilhelm Reich, that a variety of types of ego-

defenses upon character formation was dealt with, the most significant contributions which Reich delivered in terms of the concept of character, being summarized in his book, 'Character Analysis' (1949). It is herein that Reich stresses the defensive functions of the character structure, and while emphasis does shift from the study of libidinal roots, Reich does not abandon the importance of such theoretical contributions. On the contrary, Wilhelm Reich makes further elaborations to the descriptive types given by Freud, Jones and Abraham, so that ultimately several character types are devised, - the hysterical, the compulsive, the phallic narcissistic, the passive-feminine, the paranoid-aggressive, the sadistic and the masochistic characters, in addition to various other types defined by more individual themes. Further, Reich describes various typical configurations of traits in different kinds of character. For example, with regards to the hysterical character, Reich states:

"This type usually shows a clearly sexual quality in its general behaviour in the form of coquetry, and provocativeness; body movements are agile, soft and rolling; there is some general apprehensiveness, some excitability, a general inconsistency of reactions as well as some suggestibility. The sexual quality of the behaviour however does not imply genuine sexual interest, but is designed to test the irresponsiveness of others, which it basically dreads."

There are, however, two portions of Reich's conceptualization of character which are not adequate. The first is concerned with origins or the etiology of the general modes of functioning. The second

concerns its function.

Fenichel (1945) is also noted for presenting a most complete and exhaustive summary regarding the concept of character, from a psychoanalytic standpoint. Unlike Reich, Fenichel emphasizes that a wider range of variables are operative in the formation of character other than those merely of defense mechanisms. That the ego is capable of dealing with forces of this nature in an integrated manner, corroborates Waelder's (1936) conception of multiple function. Also implied here is the concept of ego-synthesis (Nunberg, 1931).

In a general sense it appears that Fenichel's approach to individual character types, their genetic explanations and etiological factors, as well as his attempts at classifying them, follows closely to the suppositions of Freud and Reich. It is clear that Fenichel elaborates on their systems and in the final analysis establishes two classifications, i.e., two major groups: those traits which serve the discharge of an impulse (Sublimation type); and those which serve as a suppression of an impulse (Reactive type).

The development of 'constitutional given mental endowments and apparatuses', and their significance for the psychological development of character, was first focused on by Henry Hartmann (1939, 1950, 1959). These apparatuses for example memory, perceptual apparatuses, motility and intelligence are part of the constructive elements which are essential for the development of adaptive behaviour, and which are contingent on 'constitutional givens'. These 'givens', depending on both their qualitative and quantitative distribution, and special

characteristics, influence not only the form of later adaptive functioning, but also mold a 'preference' for handling conflict and ways of defense. Hartmann continues on to say that "these components of ego constitution deserve our attention, just as much as the components of drive constitution" (1939). Consequently, for the first time, in tracing through the psychoanalytic pathway, the conceptualization of a biologically rooted nucleus of psychological structure, that influences characteristic form tendencies of both adaptive and defensive functioning, is established.

Environmental influences, or at least the idea of partial determination of individual character structure, has already been observed in the writings of Reich and Fenichel. Such influences were further studied in relation to libidinal development and put into the global concept of psychoanalytic ego psychology by Erik Erikson (1950, 1959). Whereas Hartmann is concerned in a general and theoretical way, with the concept of ego development and independent sources of the ego, Erikson offers explicit illustrations of how such development proceeds, i.e., modes of functioning are looked upon in terms of the 'progressive unfoldings'. David Shapiro (1965) adds that:

"Thus in contrast to Reich's modes of reactions, the general forms of functioning in Erikson's scheme have three roots: instinctual development; the unfolding of the maturational capacities and tendencies; and the external social forms that society provides at each developmental phase."

With this in mind, it is apparent that Erikson's formulations have a

somewhat different quality than the characterological types conceptualized in early psychoanalytic thinking, - they are psychosocial orientations. In fact, Erikson places a great deal of emphasis on the normal, healthy personality rather than on pathological characteristics, so that a systematic characterology based on pathological modes, has not been attempted by Erikson. Nor has he systematically and in detail related them to existing psychiatric conditions. What has been emphasized instead is a detailed consideration of the body zones associated with libidinal drive. The physical apparatuses which are part of these body zones takes us directly into Erikson's concept of 'modes', and these modes are effective during development in the context of interpersonal situations. An elaboration of these modes into 'modalities' such as "getting", "taking", "letting go", "holding on", and others then, is the final outcome.

Another thoroughfare in the development of character analysis has been experimental research in the field of cognitive functioning conducted within the framework of psychoanalytic theory (Klein, 1954; Garner, Halzman, Klein, Linton, and Spence, 1959; cf also Rapaport, 1957). The cognitive attitudes which they felt were representative of styles typical of individual subjects, were investigated by Klein and his collaborators. Consequently, this pursuit has confronted us with individually consistent ways of perceiving, of thinking and learning, etc., based primarily on a predominant style which encompasses an individual. The defensive aspect, in terms of control existing in some of these 'cognitive styles' concerned the experimenters. That

some characteristics can be viewed from an adaptive point of view, has also been considered and it is not contested that they tend to dominate the manner in which a person approaches viewing the world around him.

Summary

What we are faced with today as a result of the preceding historical research in the area of characterology, is two competing systems of classification. This is not indicative or suggestive that the difficulties and obstacles in classification have been alleviated. On the contrary, the description of character traits, types and styles or modes of functioning may be complex and rather confusing in that discrete types without overlap rarely exist.

Nevertheless, the first system of classification takes off from the principles surrounding the erogenous zonal development. The second system of classification, and the one which appears to be most relevant for the purposes of this thesis, is the one adopted by the official classification of the American Psychological Association. It recognizes various styles ranging from compulsive, paranoid, cyclothymic (manic depressive), schizoid and hysterical personalities, (Cameron, 1963). A recent presentation by Michaels (1959), has attempted to associate or combine the two systems of classifications. For example, genital or phallic traits and characteristics have been associated with a hysterical style, and anal-sadistic traits, with a compulsive style, while the depressive character has been linked to oral-narcissistic traits.

For the purposes of this thesis, the work of the preceding investigators, especially Klein and Gardner (1954, 1959), and Shapiro (1965) which assumes that individuals with similar cognitive styles, perceive and think in a similar fashion - especially the hysterical style of cognitive functioning and the obsessive-compulsive style of cognitive functioning, shall be pursued. It is hoped that distinctions in terms of differences in cognitive processes, i.e., levels of functioning, can be illustrated between these two styles or modes of functioning. A short description of the cognitive processes operating within each of these styles is in order at this time.

Hysterical Cognitive Functioning

The 'normal' well functioning personality or character can be considered, according to Samuel Kutash (1965), in terms of ego boundaries. There exists then a boundary between ego and the inner world of the unconscious (id), and one between ego and the outside world of reality. The primary function or task to be instituted by the ego is that of a successful integration of the pleasure drives and needs from within, with the reality considerations and requirements of the external world. This normal state of ego boundaries in the well-functioning personality may be represented diagrammatically (Figure 1) as follows:

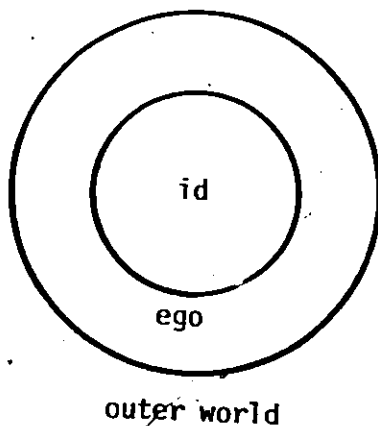


Figure 1

In the hysterical structure of character, Samuel Kutash states:

"The ego-id boundary is too rigid or over cathected reflecting massive repression of instinctual drives in varying degrees and a damming up of libido."

This character structure may similarly be represented diagrammatically (Figure 2).

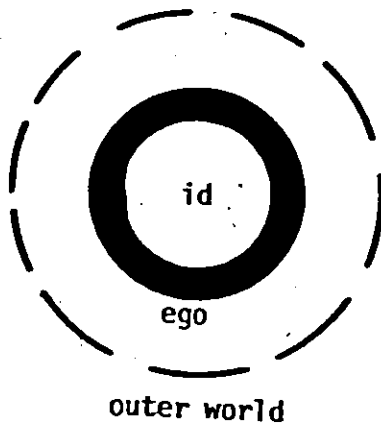


Figure 2

The etiological factors associated with a character structure or 'style' of this nature are linked with a failure to resolve oedipal conflicts and similarly with fixation at a phallic phase of libidinal development (Horney, 1967; and Cameron, 1963). Further, it has been indicated that such a deviation is a resultant effect of an early traumatic or neurotic childhood situation in which repression was developed as a primary mode of defense. Consequently, much of the unpleasant, painful stimuli were rendered unconscious so that an enormous portion of libidinal or psychic energy is squandered in the maintenance of these repressions. Thus, an inadequate cathexis of the ego-outer world boundary develops.

The end result in terms of the development of a style is the kaleidoscopic array of hysterical symptoms. Such symptoms and traits have been described in detail. (Wittels, F. (1930); Nemiah, J. (1967); Brody, E. and Sata, L. (1967); Semrad, E. (1967); Deutsch, H. (1965); Cameron, N. (1963); Angyal, A. (1965); Kutash, S. (1965); Fenichel, O. (1945); and Shapiro, D. (1965)). To list all the various characteristics indicative of the hysterical style, would be an impossible task. Only those characteristics, therefore, which shall be useful for the purpose of this thesis, primarily those which David Shapiro delineates in reference to cognitive modes of functioning, shall be discussed.

One of the major ties between hysterical cognition and specific behavioural manifestations, has to do with the concept of repression. Recognition of repression can most easily be understood when synonymously linked or viewed with the notions of forgetting, withholding and

expulsion, not necessarily of affect, but of ideational content. The loss which is incurred, is executed at a conscious level, so that there is a failure in terms of the ability to perceive specific contents or memories. David Shapiro further suggests a protective component associated with depression and describes the special qualities affiliated respectively with the hysterical style of functioning. He states:

"I am further suggesting that hysterical cognition is in general global, relatively diffuse, and lacking in sharpness, particularly in sharp detail, - in a word impressionistic. In contrast to obsessive-compulsive cognition, hysterical cognition seems relatively lacking in sharp focus of attention; tends cognitively to respond quickly and is highly susceptible to what is immediately impressive, striking, or merely obvious."

Considering the foregoing, it is easily understood that there is and should be an absence of technical and factual detail along with a lack of sharp definition in hysterical cognition. That this is conducive to the repression of memory contents, follows. Shapiro (1965) gives a striking example of this:

"Where the compulsive person carefully delineates a feature of anatomy, the hysteric looks quickly and exclaims, 'its bloody'. Whereas (in the complex and brightly coloured card X) the compulsive person may list and actively organize relations between varieties of botanical or marine specimens, the hysterical person says, 'a beautiful bouquet' or 'its Paris'..."

There are several manifestations and consequences of such a style of cognition known as hysterical traits. First, one notices a definite incapacity in terms of a persistence or intense intellectual concentration. What follows secondly, is the facilitation of distractibility or impressionability. And thirdly, a definite incapacity for technical introspection, the hysteric lives in a very 'nonfactual' world. To put it quite simply, hysterical cognitive functioning implies a high degree of suggestibility, persons being influenced easily by the opinion of others, together with a heavy reliance on 'hunches' which becomes this person's final cognitive product due to this lack of intellectual curiosity and introspection. The previous characteristics have been mentioned not only to clarify and extend the picture of hysterical cognition and thinking, but also to contrast this characteristic with the modes of cognitive functioning operative within the obsessive-compulsive style, and to support the hypothesis to follow.

Obsessive-Compulsive Cognitive Functioning

As with the hysterical character structure, the obsessive-compulsive structure may also be viewed in terms of ego boundaries. According to Samuel Kutash (1965), the obsessive-compulsive personality structure, it is the ego-outer world boundary that is too rigid - not permeable enough. The erection of a barrier between the ego and the outer world has been constructed and held together by such character defenses as intellectualization, rationalization, isolation of affect, and compulsions. This may also be represented diagrammatically, much the same as the hysterical style, as follows:

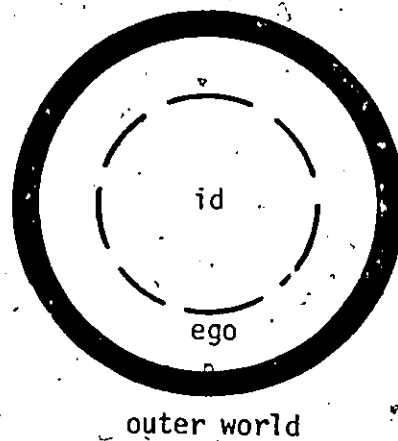


Figure 3

In addition, the internal boundary between the ego and id, by contrast, is too permeable so that sexual thoughts, unacceptable ideas and various other promptings from within continually invade consciousness in the form of obsessions. These obsessions are prevented from being acted out by the relatively impermeable boundary. In terms of capacity for reality testing, obsessive-compulsive cognition preserves this through rigid defenses surrounding the ego-outer world boundary. Characteristics such as rigidity, extreme conservatism, and the desire to maintain the existing order hence develop.

Horney (1967) and Cameron (1963), reason that the etiological factors engulfing this type of character can be linked to anal-sadistic trends and fixation at the anal level. Such a deflection finds its origins in child-parent struggles over strict or premature bowel control and in regression in childhood after an apparent failure to conquer oedipal conflicts at the genital level. Consequently, the

development of the obsessive-compulsive style, characteristics, symptoms and modes of functioning arise and these have been described in detail (Lewin, B. (1930); Brody, E. and Sata, L. (1967); Semrad, E. (1967); Salzman, L. (1968); Deutsch, H. (1965); Cameron, N. (1963); Angyal, A. (1965); Kutash, S. (1965); Fenichel, O. (1945); Shapiro, D. (1965). As with the hysterical style of functioning the list of characteristics is endless for the obsessive-compulsive style, so that again only those characteristics pertaining to and useful for the purposes of this thesis shall be discussed. Again, David Shapiro (1965), provides a quite adequate description regarding cognitive modes of functioning.

As the hysterical cognition is exemplified by an element of distractibility and suggestibility, the obsessive-compulsive cognition is one of rigidity and precise cognitive processes. Behaviourally, this manifests itself in a high opinionated and dogmatic fashion. Shapiro (1965) states:

"Perhaps the most conspicuous characteristics of the obsessive-compulsive style is the intense, sharp focus of attention... They concentrate, and particularly do they concentrate on detail... These people not only concentrate; they seem always to be concentrating."

In the hysterical style, it was observed that affective experience virtually dominated the individual's existence, and as a result ideational content was diminished. In the obsessive-compulsive style, on the other hand, affective experience on the whole 'shrinks' and is replaced by ideational content. The result of this imbalance is a

person who does in fact radiate a great capacity for technical introspection and ascertains elevated persistence in intellectual arenas. Obsessive-compulsive cognition thus becomes typically distinguished by specific definition particularly sharp in detail, and an overabundance of intellectual curiosity. In some cases, the latter becomes so intense, that it appears 'driven' and the individual appears pressed by some necessity or requirement. Shapiro (1965) continues:

"These people will frequently give themselves deadlines for various activities which logically may be quite arbitrary. One patient decided that he must have a better job by his next birthday or else he would have to regard himself as a failure. Of course, he then felt extremely pressed as the day approached as anyone would given his assumption. With the passing of his birthday the deadline was shifted to the first of the year and so on."

The necessity to sustain a rigid and continuous state of directed and purposive activity along with a component of pressure requires an experience of this sort, - an experience which is both compelling and morally imperative and involves superiority to his own wishes or choices. Characteristics which are analogous to the preceding descriptions have been noted by other investigators within the psychoanalytic framework.

Freud (1932) spoke of the perfectionistic and decisive qualities of the obsessive-compulsive style. Similarly, Janet (1965) speaks of the obsessive's ability to be overconscientious, persistent and precise. Emphasis on reason and logic, orderliness, and a high degree

of intellectualization are stressed by Nemiah (1967). Salzman (1968), who compiled the most elaborate and descriptive list regarding the obsessive-compulsive, discusses their intense involvement in philosophic considerations of abstract justice, the high degree of intellectual integrity and intellectual curiosity. He says:

"Since he approaches life in an intellectualized fashion, the obsessional tries to appear unmoved by disturbing or rewarding experiences. He tries to examine each situation as a rational event. Since intellectual reactions are entirely under control it is not hard to understand why the obsessional person places such an emphasis on intellectuality."

Further Cognitive Processes

It is apparent then that from the previous collection of data regarding the hysterical cognitive style of functioning and obsessive-compulsive cognitive style of functioning, that there is an expectation to obtain clear distinctions in terms of thinking processes, perceptual apparatuses, and learning arenas, i.e., modes of cognitive functioning. That specific discriminations in this area have been observed does not in any way imply that obsessive-compulsive and hysterical styles are distinct types in themselves, with little or no overlap. In fact, there are many similarities which unite these two styles of functioning. For example, both may be viewed as methods of evading or avoiding personal growth, while simultaneously giving the semblance of maturity, even though they are utilized as methods of denying responses for one's conduct of life (Anygal, 1958). The various styles are, in another

sense, instituted to allay anxiety and resolve the conflict between neurotic trends, so that the child, and later the adult, can and must institute further protective measures. In this way an evolution occurs which is the basis for the self-perpetuation of a neurotic development.

These protective measures are actually characterological defenses or solutions to conflict (Horney, 1967). With this in mind, certainly a variety of styles, of modes of functioning can be found operative within a single individual. The emphasis here of vital importance is the qualitative component, i.e., the implication of the question of degree, which induces a particular person to select a predominant style or mode of cognitive functioning, while the other modes are subdued in the background of the character.

Certainly the development of cognition involves the development of an interaction among the circumstances of life, so that individuals who are predisposed to circumstances and stimuli (similar parent training procedures, reaction patterns, environmental uniformity, etc.) which are similar, shall tend to develop similar reaction patterns, referred to as a 'style'.

To trace the steps back to infancy, according to Piaget, during the entire developmental period the child is involved in building schemata which are organizations of behaviour relevant to each other. This schemata are acquired by the dual processes of assimilation and accommodation. Keeping this in mind, the concept that cognition and intelligence too, is determined by internal processes presumably

genetically determined, no longer is universally accepted. Instead, evidence is in favor of those who view intelligence and cognition as a function that develops in the relationships between the individual and his environment. (Martin Deutsch, 1967). Consequently, in childhood it is 'language' that becomes the currency of cognition and hence determines or defines an individual's style. That the child learns the language of the people that surround him, leaves the implication that the differing kinds of child-rearing techniques can and do have very differing effects on the development of an individual's mode of reaction and functioning. A person's cognitive functioning is not a thing apart from his affective or emotional functioning and hence cognition may include many points of relationship between cognitive and emotional processes and their subsequent interaction and relationship with the individual orientational entity called style (Martin Deutsch, 1967). In the final analysis, and in accordance with the theoretical formulations of Klein and Gardner (1954) and David Shapiro (1965), the presumption that people who have similar styles (e.g., hysterical, obsessive-compulsive) utilize similar apparatuses and thinking processes, is strengthened.

For example, one may propose that individuals within a particular style may cognitively function at a particular point on a continuous scale. Further, Russell and Saadeh (1962) propose a continuum proceeding from "concrete" to "functional" to "abstract". The terms are in the tradition of Reichard, Schnieder, and Rapaport (1944), who in studying concept formation concluded that there are three

methods employed. To explain further, the continuum ranges from being more dependent on the actual presence and the sensing of stimuli of the environment to being relatively more independent of concrete stimuli and operating instead with symbolic representations of stimuli in memory. The continuum of Russell and Saadeh (1962) along with those of Church (1961) and Green (1931) were integrated into a "Qualitative Analysis of Verbal Responses" by A. A. Surkis (1963). Essentially, this scale consists of four levels of cognitive functioning, 'abstract conceptual', 'functional', 'concrete' and 'incorrect', with a further breakdown of these levels into 21 subcategories (see Appendix). The fact that individuals within a particular style tend to utilize similar perceptual apparatuses, thinking processes, etc., would suggest therefore that individuals with a similar style should also accumulate or aggregate at a particular level of Surkis's scale. Given that this occurs and in view of the proceeding discussion regarding the hysterical style and obsessive-compulsive style and their respective cognitive modes of functioning, the following hypotheses are generated:

Hypothesis I

In a qualitative analysis of verbal responses, it is expected that those individuals that maintain an obsessive-compulsive style, will give a statistically significant greater number of abstract (Level 3) responses than those individuals with an hysterical mode of functioning.

Similarly,

Hypothesis II

In a qualitative analysis of verbal responses, it is predicted that those individuals within the hysterical style, will give a statistically significant greater number of functional and concrete (Levels 1 and 2) responses, than those individuals with an obsessive-compulsive mode of functioning.

Due to the fact that these two styles are not absolutely distinct styles in themselves, and overlap does exist, a third and fourth hypothesis are proposed. They are:

Hypothesis III

It is predicted that abstract responses (in the form of modified synonyms) are found to be given significantly more often than the other subcategories, by hysterical individuals. (This is due to the fact that these responses are so similar to the global descriptions which are typical of these individuals.)

Conversely,

Hypothesis IV

It is predicted that when those individuals with an obsessive-compulsive style tend to leave the abstract level of functioning, that they will respond significantly more often in the functional level than in either the concrete or the incorrect levels.

CHAPTER II

METHOD

Materials

The first step of the experimental study made use of the Minnesota Multiphasic Personality Inventory (M.M.P.I.) to obtain individual protocols of two types, viz., a 'normal' protocol with high hysterical trends predominating and a 'normal' protocol with high obsessive-compulsive trends predominating. The M.M.P.I. is a psychometric instrument designed ultimately to provide, in a single test, scores on all the more important phases of personality. (Hathaway and McKinley, 1951 c 1943). The subject is asked to sort all of the statements into three categories: True, False, and Cannot Say. The subjects responses are then counted so as to yield scores on four validity scales and nine clinical scales. On the basis of the latter nine scales, it is then feasible to assess the personality characteristics for diagnostic purposes. These nine scales are: Hypochondriasis, Depression, Hysteria, Psychopathic Personality, Masculinity-Femininity, Paranoia, Psychasthenia, Schizophrenia, and Hypomania.

The usual procedure in interpreting results is to translate the raw score of each measured trait into a standard score (t-score) and plot it on a profile chart. In effect, this procedure permits analysis of the relative strengths of the various phases, so that not only can the overall pattern be observed, but also the predominance of any one

particular phase or 'style' can be noted. It is particularly important to mention at this time that although the scales are designated according to the abnormal manifestation of the symptomatic complex, they have all been shown to have significance within the 'normal' range. And while the M.M.P.I. is usually utilized to ascertain interpretations regarding psychopathological abnormalities, which is done by looking at the extreme scores, i.e., the 'peaks', this is not the purpose for its use herein. The intention here is to use only those protocols within the 'normal' range, noticing instead the preference for specific trends, the predominant mode of functioning which a particular individual has selected as a way of approaching his environment, of defending against it, and reacting to it. It is this scale then which shall be utilized in selecting those individuals with obsessive-compulsive trends or 'styles' and individuals with hysterical trends or 'styles', the exact method of selection being described below.

The second step of this experimental study made use of the Wechsler Adult Intelligence Scale (W.A.I.S.) (David Wechsler, 1939 c 1955). This psychometric instrument is composed of 11 subtests, six of these being grouped into the Verbal Scale (Information, Comprehension, Arithmetic, Similarities, Digit Span, and Vocabulary); the remaining five comprising the Performance Scale (Digit Symbol, Picture Completion, Block Design, Picture Arrangement, and Object Assembly). All 11 subtests are combined to make the Full Scale.

While the Wechsler was originally developed as a measure of intelligence, the potential for the Wechsler in the last 15 years for a

much wider and more extensive clinical assessment has been realized. The various uses of this test developed as a result of the many expanded conceptualizations of intelligence, particularly as an expression of ego-functioning. In another sense, the latter development is synonymous with the view that each of the components of the intellectual process is representative of a general cognitive mode of interacting, functioning and meeting reality demands. It is easy to understand why Allison, Blatt, and Zimet (1968) in 'The Interpretation of Psychological Tests' state:

"The rationale for including the Wechsler into a diagnostic test battery, therefore, is based on more than an attempt to assess a general intellectual level, but rather in order to look beyond the gross I.Q. measure and tap the various cognitive abilities or ego-functions that make up intelligence."

With this in mind then, one of the most essential functions of the W.A.I.S. becomes the assessment of certain adaptive potentials of the individual, specifically his ability to function effectively in relatively impersonal situations which may involve past achievements and current solving efforts. Consequently, suitable functioning on the Wechsler regardless of intellectual level, demands the maintenance of the ego boundaries so that primitive fantasies and desires do not permeate reality oriented thought.

While the Vocabulary subtest (see Appendix) used alone is indicative of the breadth of concepts, ideas and experience gained during one's lifetime, for the purpose of this thesis, each word on every

protocol shall be analyzed in terms of qualitative content. This is enacted in hopes of distinguishing hysterical responding and cognitive functioning from obsessive-compulsive responding and cognitive functioning.

The final scale to be utilized in the present experiment is the 'Qualitative Analysis of Verbal Responses to the Wechsler Adult Intelligence Scale' (A. A. Surkis, 1963). Essentially, this scale is composed of four levels of responding - 'Abstract Conceptual', 'Functional', 'Concrete', and 'Incorrect'. Within each of these levels there are also further subcategories, qualitative in nature. They are as follows:

Level 3 Abstract Conceptual

- Synonym Unmodified
- Synonym Modified by Use
- Synonym Modified by Degree
- Synonym Modified by Description
- Formal Classification
- Functional Classification
- Paraphrase

Level 2 Functional

- Objective Use
- Explanation
- Description
- Explanation and Description

Level 1	Concrete
	- Repetition in Context
	- Functional (Subjective Use)
	- Demonstration
	- Illustration
	- Inferior Explanation
Level 0	Incorrect
	- Incorrect Definition
	- Misinterpretation
	- Clang Association
	- Repetition (Without Context)
	- Omission

Applying this scale, each word on the Vocabulary subtest of the W.A.I.S. may then be placed within one of the subcategories. It will then be possible to determine if there are indeed qualitative differences in the levels of functioning between individuals with an obsessive-compulsive style and individuals with a hysterical style.

It is a customary procedure to measure the reliability of qualitative scoring categories by comparing the scores given by two or three independent examiners for the same response. A. A. Surkis in an effort to establish reliability for this scoring method, carried out such a procedure for the Wechsler Intelligence Scale for Children. A. A. Surkis (1963), had 21 of the cases rescored by an experienced examiner, not specially trained in the present method of scoring. The Arrington (1932) formulation was employed:

$$\frac{2 \times \text{Agreements}}{(2 \times \text{Agreements}) + \text{Disagreements}}$$

The median agreement was .97. One word, 'disproportionate', gave a coefficient of .75. Twenty-three words were reliable at a minimum of .90 with 20 words having a reliability of equal to or greater than .95.

Procedure

Sixty M.M.P.I. protocols from a population of judged hysterical and obsessive-compulsive personality types were obtained. The rationale for using the M.M.P.I. is that, not only does this instrument permit analysis of the relative strength of either the hysterical trend or the obsessive-compulsive trend, but also analysis of the overall pattern can be undertaken so as to keep all of the protocols within the 'normal range', for this thesis. Also, the past research has shown that the two scales of exclusive concern herein, the 'HY' and the 'PT' have obtained a high degree of correlation with the particular neurotic style associated with it - .87 for hysterical psychiatric patients (N=30) and .72 for hysterical normals (N=100); while .72 was obtained for obsessive-compulsive psychiatric patients (N=30) and .90 for normal obsessive-compulsives (N=100).

For the present study, the M.M.P.I. protocols were first sorted in an effort to obtain only those which may be considered 'normal' protocols, i.e., not highly neurotic or psychotic and in general remaining within a T score ranging from 30 to 70. After this procedure was carried out, the protocols were again sorted, so that individuals with either an obsessive-compulsive style or hysterical style could

be selected. Operationally and in terms of raw scores, any female with a raw score of 19 or above (a T score of at least 50) or any male with a raw score of 17 or above (a T score of at least 50) on the HY scale, satisfied the requirements for a hysterical candidate.

Similarly, any female with a raw score of 25 or below (a T score of at most 50) or any male with a raw score of 23 or below (a T score of at most 50) on the PT scale, satisfied the requirements for an obsessive-compulsive candidate. Both of these cut-off points mark the upper half of the normal range. Further, 86 percent of all the hysterical candidates chosen for the present study fell within a T range of 60 to 70 (the upper 1/4 of the normal range) and 66 percent of all the obsessive-compulsive candidates chosen fell within a T range of 30 to 40 (the upper 1/4 of the normal range). In addition, each subject was mutually exclusive with regards to the two scales, i.e., individuals must have either hysterical predominating trends or obsessive-compulsive predominating trends, but not both.

After the present author selected those individuals which he considered suitable, the protocols were then given to two other psychologists, who further sorted out those profiles which they felt should not be utilized. The final outcome was a N=30 for the hysterical group and a N=30 for the obsessive-compulsive group.

The second criterion involved the administration of the W.A.I.S. so that in particular the 60 subjects could respond to the Vocabulary subtest, and hence their level of cognitive functioning, i.e., 'Abstract', 'Functional', 'Concrete' or 'Incorrect' could be ascertained.

The rationale for giving either the entire W.A.I.S. or the entire verbal portion of the W.A.I.S. was to insure that all of the candidates maintained at least an 'average' level of functioning. Any candidate that obtained an I.Q. of below 90, was discarded as they fell below the 'average' range of intelligence.

Finally, the 60 subjects Vocabulary subtest was scored using Surkis's scale (see Appendix). Each word was placed in one of the 21 categories and scored accordingly. Any word which fell within a category within the 'Abstract' level of functioning (Level 3) was assigned 3 points; any word that fell within one of the categories in the 'Functional' level of functioning (Level 2) was assigned 2 points; while any word which fell within any of the categories in the 'Concrete' level of functioning (Level 1) was assigned 1 point; and 0 point was assigned for all those words which fell within the 'Incorrect' level of functioning (Level 0).

Subjects

The subjects which were utilized for the present experiment were obtained from two sources: some of the Subjects (110) who participated were enrolled in an introductory class (1st year) at the University of Windsor; the others (3,000) who participated were individuals who had at some time previously undergone psychological testing at the Montreal General Hospital, Montreal. There, protocols were extracted from Psychological Records therein. One-half of the total number of subjects from each personality group came from each of the subject sources.

For those subjects with a hysterical style of functioning, the ages varied from 17 to 46, with a mean age of 25.86; while the age range for those individuals with an obsessive-compulsive style of functioning ranged from 17 to 57, with a mean age of 27.03. The overall range for all subjects was therefore 17 to 57, with a mean age of 26.25.

The total of 60 subjects was composed of 30 with a hysterical style and 30 with an obsessive-compulsive style. In addition, there were 17 females and 13 males within the hysterical group and 16 females and 14 males within the obsessive-compulsive group - a total of 33 females and 27 males in all.

Statistical Treatment of the Data

In order to test the quantitative element of the previous hypotheses, i.e., simply that the obsessive-compulsive cognitive responding and functioning should be operating at a higher level than that of the hysterical functioning, a one-sided student's T-Test was employed. This is merely a comparison and an evaluation of the means between the two groups, where in this case, the comparison is of the total weighted scores. In addition, the fact that a directional (one-sided) test is indicated is suggestive of the following relationship:

$$H_0: u_1 - u_2 = 0$$

where u_1 is equal to the obsessive-compulsive group total score and u_2 is equal to the hysterical group total score. If the previous

hypotheses are correct, there would be justification in drawing the inference that from these data, the two experimental conditions (the hysterical group and the obsessive-compulsive group) are exerting a differential effect in terms of levels of cognitive functioning.

In order to test the qualitative components of the previous hypotheses (secondary) a 4 x 2 Analysis of Variance (ANOVA) was employed. Essentially, this involves an analysis of the mean performances of individuals within both the obsessive-compulsive group and individuals within the hysterical group, on the four levels of Surkis's scale, viz., Abstract, Functional, Concrete, and Incorrect. The repeated measures stipulation simply means that the same subject is analyzed under a number of different conditions, in this case the levels of cognitive functioning. Where the one-sided student's T-Test was employed, it was indicative solely of which of the two groups in the experimental study was functioning at a higher level cognitively, etc. The 4 x 2 ANOVA on the other hand allows a much more detailed breakdown, so that the actual number of abstract responses, of functional responses, of concrete responses, and of incorrect responses for each group can be recorded. After this procedure is carried out for each individual subject in each of the two groups, the calculated responses in each level of cognitive functioning can be analyzed in terms of significant differences between the obsessive-compulsive group and the hysterical group. For example, if there are significant differences found, and if the previous hypotheses are correct in their assumption, the differences found would be due to a higher proportion

of abstract responses for the obsessive-compulsive group and a higher proportion of functional and concrete responses for the hysterical group of individuals.

It might be added that if these two measures proved inadequate in terms of a display of a sufficient amount of information and knowledge regarding the statistical implications of the data, further analysis in terms of an overall Chi-Square and a 2 x 21 ANOVA would be indicated.

Chapter III

Presentation and Analysis of Results

The purpose of the present study was to determine the differences in levels of cognitive functioning between two personality types - individuals with an obsessive-compulsive style and individuals with a hysterical style. The differences which may be expected are divided into two types: 1) quantitative differences, which simply asks whether or not the obsessive-compulsive group and the hysterical group differ in their cognitive functioning scores per se. This was determined in the present study by performing a one-tailed t-test and hence comparing the means of the total scores of both groups to ascertain if there was a significant difference; and 2) qualitative differences, which determine precisely how and where the two groups differ on levels of cognitive functioning. This necessitated a 4 x 2 Analysis of Variance with repeated measures on one factor. These then, were the two statistical procedures carried out for the present study.

The results of the one-tailed t-test reveal a total mean score of 79.60 for the obsessive-compulsive group and a total mean score of 56.73 for the hysterical group. Further, the difference between the two means is in the predicted direction and is statistically significant ($t = 5.89, p < .0001$).

In the 4 x 2 Analysis of Variance for the present study factor A represents personality type - obsessive-compulsive (a_1) and hy-

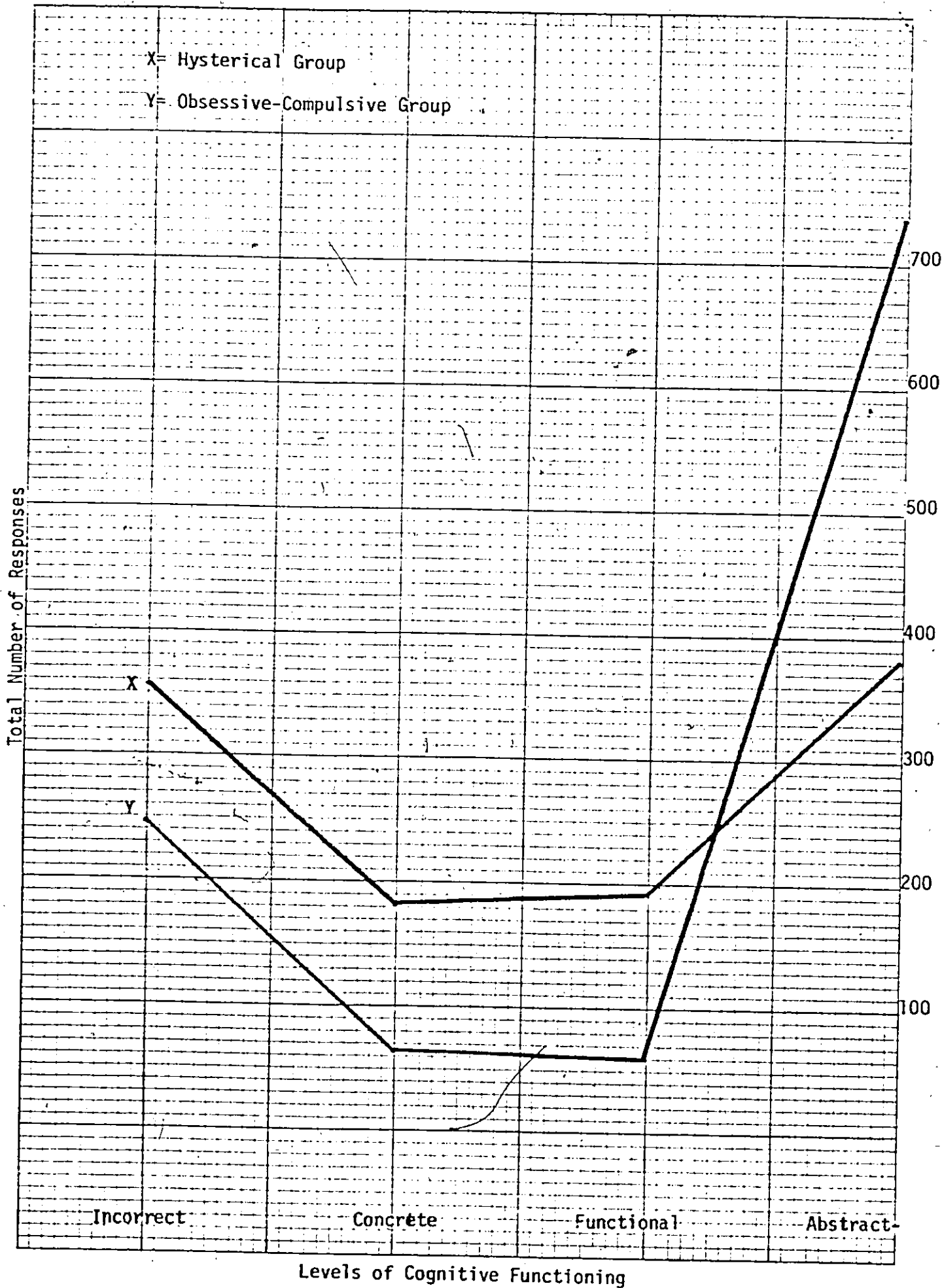
sterical (a_2); and factor B - levels of cognitive functioning, viz. incorrect (b_1), concrete (b_2), functional (b_3), and abstract (b_4).

Hypothesis I, which predicts a statistically greater number of abstract (Level 3) responses from those individuals maintaining an obsessive-compulsive style and Hypothesis II, predicting a statistically greater number of functional (Level 2) and concrete (Level 1) responses for those individuals maintaining a hysterical style, would be upheld if a significant F for main effect B (within group effect) and a significant F for A x B (group x level of cognitive functioning) interaction were obtained. Results of this procedure reveal significance for main effect B ($F = 141.01, p < .0001$), indicating that the four levels of cognitive functioning were used with unequal frequency by both the obsessive-compulsive group and the hysterical group. Similarly a significant difference was also found for the A x B interaction effect ($F = 47.21, p < .0001$). This latter finding suggests that not only does the frequency or proportioning of the number of words in each of the levels of cognitive functioning vary, but also that this proportioning is different for each of the two groups (obsessive-compulsive and hysterical). The differences in the proportions of both the obsessive-compulsive group and the hysterical group is graphically illustrated in Figure 4, page 40a.

The secondary Hypotheses, III and IV were merely developed to report that the obsessive-compulsive style and the hysterical style are not absolutely distinct in themselves and that overlap does exist. Hypothesis III predicted that when an individual with an

hysterical style did give abstract responses, that they would be in the form of modified synonyms. Results show, on the contrary, that of the total number of abstract responses (380) given by the hysterical group, only 19 were coded as modified synonyms, 14 of the 19 being coded as synonyms modified by description. The remaining 361 responses (Level 3) were coded simply as pure synonym responses.

Hypothesis IV predicted that when the individual with an obsessive-compulsive style was not responding in the abstract level of functioning, that there would be the tendency to respond more often in the functional level (Level 2) than in either the concrete level (Level 1) or the incorrect level (Level 0). Again the results indicate that this hypothesis was not confirmed, the second highest effect being the incorrect level (Level 0) with a total of 249 responses out of a possible 1110 responses.



Chapter IV

Discussion of Results

The present research was concerned with investigating the relationship between levels of cognitive functioning and personality styles- the obsessive-compulsive and the hysterical. Sixty subjects, thirty individuals with obsessive-compulsive trends and thirty with hysterical trends, were selected on the basis of their scores on the HY and PT scale, along with their overall profile on the Minnesota Multiphasic Personality Inventory. These subjects were then administered the Wechsler Adult Intelligence Scale and their responses to the Vocabulary Subtest scored, using the qualitative scale developed by A.A. Surkis (1963), in an effort to ascertain their level of cognitive functioning. i.e. 'abstract', 'functional', 'concrete', or 'incorrect'. The main objective of this procedure was to detect differences in cognitive functioning between the two personality types (obsessive-compulsive and hysterical).

The results presented in the previous chapter indicate significant differences, both quantitative, that is differences in the mean performance of the two groups and, qualitative, viz, differences in the proportions or frequency of the four levels of cognitive functioning (B effect) and differences in the proportions or frequency for each of the two groups. Further, these significant differences were in the predicted direction so that Hypotheses I and II were both confirmed. To be more specific, Hypothesis I predicted that those

individuals maintaining a obsessive-compulsive style would give a statistically significant greater of abstract responses than those individuals maintaining a hysterical style. Figures indicate that out of a possible 1110 responses, the obsessive-compulsive group gave 736 abstract responses, while the hysterical group gave only 380 abstract responses. Similarly, Hypothesis II predicted a statistically significant greater number of concrete and functional responses from those individuals maintaining a hysterical style, than from those maintaining an obsessive-compulsive style. Again figures reveal that the hysterical group gave a total of 181 concrete responses and 191 functional responses, while the obsessive-compulsive group gave only 64 concrete responses and 61 functional responses.

The data also made clear that Hypothesis III, which predicted that when individuals with a hysterical style did elicit abstract responses, that the greater proportion of these responses would be in the form of modified synonyms, was rejected. It was the author's initial contention that since hysterical cognition is in general global, relatively diffuse and lacking in sharpness, the tendency would be to temper and qualify precise synonyms through modification. However, as indicated previously this proved not to be the case, so that of the total number of abstract responses (380) given by the hysterical group, only 19 were coded as modified synonyms, 14 of the 19 being coded as synonyms modified by description. The remaining 361 abstract responses elicited by this group were simply coded

as pure synonym responses. One of the explanations for this occurrence is that, in the present case, modifications of any sort served as an addition of factual and technical detail and in fact sharpened the precision and decisive qualities of the definition. Consequently, to modify a synonym with further description and detail is not as typical of the global and relatively diffuse qualities of hysterical cognition as simply to give pure synonym responses.

(Rejection of Hypotheses IV, which predicted that when individuals maintaining an obsessive-compulsive style were not functioning at an abstract level, that they would respond significantly more often in the functional level than in either the concrete or the incorrect levels, was disclosed by the data. It would initially appear that when individuals in the obsessive-compulsive group found the abstract level inappropriate in terms of responding, there would be the tendency to simply 'drop down' to the next level of cognitive functioning. In the present study however, the second highest effect or proportion of responses for the obsessive-compulsive group was the Incorrect level (Level 0) with 249 responses as opposed to the Functional level (Level 2) with only 61 responses. One of the explanations for this revolves around the dogmatic, rigid, inelastic, precision qualities so typical of obsessive-compulsive functioning. So that it is indeed difficult for these individuals to function at a lesser level, cognitively. When they must however, there is the tendency to simply reject all forms of explanation or on the other hand, to

invent inappropriate explanations, thus, placing their responses at the Incorrect level (Level 0). This was the case in the present study.

Certainly the most striking findings of this study is the confirmation of Hypotheses I and II, the primary suppositions and contentions of the present study. The psychological implication of such affirmation, and one which is direct support of the theoretical formulations of Klein and Gardner (1954,1959) and Shapiro (1965), is that, at least cognitively, individuals with similar personality trends or styles utilize similar modes of reaction, cognitive apparatuses, thinking processes and learning patterns. That these styles, the obsessive-compulsive and the hysterical, are sufficiently idiosyncratic and distinct from one another so as to produce significant differences in cognitive spheres, is also upheld. It is not at all astounding to learn that individuals with obsessive-compulsive styles spend a great deal of their time with abstractions, if one considers the previous descriptive characteristics of this style, furnished by previous investigators. The defence mechanisms of intellectualization and rationalization, the two defence mechanisms utilized most often by obsessive-compulsive individuals, lend themselves to and correspond with cognitive functioning at an abstract level. That individuals with obsessive-compulsive styles are opinionated, dogmatic, and precision-oriented, having elevated persistence in intellectual curiosities, integrity, and concentration, - is also congruous with cognitive functioning at an abstract level.

Similarly, that hysterical cognitive functioning is operating a great deal of the time at concrete and functional levels is not that astonishing when considering the characteristics delineated by previous investigators with regards to this personality style. It is easily understood that the obvious absence of technical and factual detail, the lack of sharp definition, and a definite incapacity in intellectual arenas, so typical of hysterical cognition, exclude these individuals, i.e. inhibit them from responding at an abstract level. Also noted distractability, relative diffusion and facilitation of impressionability manifested by individuals maintaining a hysterical style, further subtracts from their ability to entertain abstractions. Consequently, cognitive functioning appears much more concrete and functional for these individuals than for those individuals with an obsessive-compulsive style.

In the final analysis we must accept, on the basis of this study the contentions of Klein and Gardner (1954, 1959) and Shapiro (1965) and the present author that, in general individuals who maintain a similar style, personality, character, etc., tend to have similar modes of reaction and in this case utilize similar cognitive apparatuses and functions. More specifically that individuals with obsessive-compulsive trends function at an abstract level cognitively, and those individuals with hysterical trends at a functional and concrete level cognitively (Hypotheses I and II).

The author recognizes the limitations of the present study and the possibility that other tests of the same population may yield

differences (other than those obtained herein) between the various groups. One of the difficulties in trying to replicate a design of this nature herein, is recognized in venturing to obtain an equal and uniform population. There is such an extreme variance in personality patterns and structures that it is deemed almost impossible, at any rate, highly improbable to furnish personality protocols and profiles which match those of the present study. What is particularly complex in such a matching procedure is that optimally all variables, i.e. not only the hysterical level and the obsessive-compulsive level, but also the overall personality profile, the ages, the sampling localities and backgrounds etc., should be congruent. Also of extreme importance is the question of degree or in other words, the psychopathological level of the individual. To recognize and distinguish between normals, normals with neurotic trends, individuals who are low in neurosis, individuals who are highly neurotic, psychotic, etc., is vital not only with regards to maintaining groups who are functioning at the same level but also with regards to the interpretation of results. What one must realize then, and unfortunately few researchers and investigators have realized, is that the extent of operationalism needed to produce an experimentally sound research design and proposal, directly places massive confines on interpretations via generalizations of the conclusions.

Consequently there remains a need for further research in this area, particularly on a qualitative level since almost all work done to date has been concerned merely with quantitative differences. It simply is not enough to suggest that two groups differ without

incorporating into ones design a procedure that will help to determine the precise area and type of differences. In the present study the 4 x 2 Analysis of Variance was instituted to determine such differences. Further, in the area of determining and detecting differences between personality types, there remain a great many components beyond the cognitive component which still require clarification on a qualitative level.

Chapter V

Summary

Despite the fact that personality types are not distinct in themselves and that intermingling between the various types does exist, it was possible in the present study to detect well-marked differences in cognition between two personality types- obsessive-compulsive and hysterical. There has been little controlled research involved in establishing and substantiating differences between the various personality types or 'styles'. The handful of legitimate studies carried out in this area are for the most part quantitative in nature. Further very little has been achieved in the cognitive sphere, i.e. distinguishing between cognitive apparatuses, thinking processes, perceptual patterns, etc., of various personality types.

The present study, following the theoretical formulations of Klein and Gardner (1954, 1959) and Shapiro (1965), investigated the relationship between levels of cognitive functioning and personality type, (obsessive -compulsive and hysterical). Sixty subjects, thirty individuals with obsessive-compulsive trends and thirty individuals with hysterical trends, were selected on the basis of their performance on the Minnesota Multiphasic Personality Inventory. After administering the Vocabulary Subtest of the Wechsler Adult Intelligence Scale to these individuals, their answers were scored and coded using a qualitative analysis developed by A.A. Surkis (1963). It was then possible to determine if there were differences in the level of cognitive func-

tioning between the obsessive-compulsive group and the hysterical group (as revealed by a one-sided t test) as well as differences in the quality of responding for each group (as revealed by a 4 x 2 Analysis of Variance).

The results of the study indicate significance statistically in the predicted direction so that in the final analysis it was confirmed that individuals with obsessive-compulsive trends function significantly more often at the abstract level of cognition than individuals with hysterical trends (Hypothesis I). Similarly, it was upheld that those individuals maintaining a hysterical style did function significantly more often at the functional and concrete level, than those individuals maintaining an obsessive-compulsive style, (Hypothesis II). Certainly the most important finding of this study then, is the confirmation of these Hypotheses (I and II), for such results are in support of the formulations of Klein and Gardner (1954, 1959) and Shapiro (1965) viz., that individuals with similar styles of functioning tend to utilize similar modes of reaction. More specifically herein, that individuals with similar styles, function cognitively at similar levels.

The author recognizes the limitations of the present study and the possibility that other tests of the same population may yield differences, (other than those obtained) between the two groups. Also additional research could be carried out and further information ascertained through investigation in areas other than cognition; and by expanding the present design to accommodate several other personality types. At any rate it certainly can be concluded, at least for

the subjects involved in the present study, that quantitative and qualitative differences in levels of cognitive functioning between the two groups -obsessive-compulsive and hysterical, were present. There remains a need for further research in this area, particularly research involved in ascertaining qualitative distinctions, since almost all work done to date has simply been concerned with quantitative differentiation.

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APPENDIX I

Minnesota Multiphasic Personality Inventory
Form R

APPENDIX I

1. I like mechanics magazines.
2. I have a good appetite.
3. I wake up fresh and rested most mornings.
4. I think I would like the work of a librarian.
5. I am easily awakened by noise.
6. I like to read newspaper articles on crime.
7. My hands and feet are usually warm enough.
8. My daily life is full of things that keep me interested.
9. I am about as able to work as I ever was.
10. There seems to be a lump in my throat much of the time.
11. A person should try to understand his dreams and be guided by or take warning from them.
12. I enjoy detective or mystery stories.
13. I work under a great deal of tension.
14. I have diarrhea once a month or more.
15. Once in a while I think of things too bad to talk about.
16. I am sure I get a raw deal from life.
17. My father was a good man.
18. I am very seldom troubled by constipation.
19. When I take a new job, I like to be tipped off on who should be gotten next to.
20. My sex life is satisfactory.
21. At times I have very much wanted to leave home.
22. At times I have fits of laughing and crying that I cannot control.
23. I am troubled by attacks of nausea and vomiting.
24. No one seems to understand me.
25. I would like to be a singer.
26. I feel that it is certainly best to keep my mouth shut when I'm in trouble.
27. Evil spirits possess me at times.
28. When someone does me a wrong I feel I should pay him back if I can, just for the principle of the thing.
29. I am bothered by acid stomach several times a week.
30. At times I feel like swearing.
31. I have nightmares every few nights.
32. I find it hard to keep my mind on a task or job.
33. I have had very peculiar and strange experiences.
34. I have a cough most of the time.
35. If people had not had it in for me I would have been much more successful.
36. I seldom worry about my health.
37. I have never been in trouble because of my sex behavior.
38. During one period when I was a youngster I engaged in petty thievery.
39. At times I feel like smashing things.

40. Most any time I would rather sit and daydream than to do anything else.
41. I have had periods of days, weeks, or months when I couldn't take care of things because I couldn't "get going."
42. My family does not like the work I have chosen (or the work I intend to choose for my life work).
43. My sleep is fitful and disturbed.
44. Much of the time my head seems to hurt all over.
45. I do not always tell the truth.
46. My judgment is better than it ever was.
47. Once a week or oftener I feel suddenly hot all over, without apparent cause.
48. When I am with people I am bothered by hearing very queer things.
49. It would be better if almost all laws were thrown away.
50. My soul sometimes leaves my body.
51. I am in just as good physical health as most of my friends.
52. I prefer to pass by school friends, or people I know but have not seen for a long time, unless they speak to me first.
53. A minister can cure disease by praying and putting his hand on your head.
54. I am liked by most people who know me.
55. I am almost never bothered by pains over the heart or in my chest.
56. As a youngster I was suspended from school one or more times for cutting up.
57. I am a good mixer.
58. Everything is turning out just like the prophets of the Bible said it would.
59. I have often had to take orders from someone who did not know as much as I did.
60. I do not read every editorial in the newspaper every day.
61. I have not lived the right kind of life.
62. Parts of my body often have feelings like burning, tingling, crawling, or like "going to sleep."
63. I have had no difficulty in starting or holding my bowel movement.
64. I sometimes keep on at a thing until others lose their patience with me.
65. I loved my father.
66. I see things or animals or people around me that others do not see.
67. I wish I could be as happy as others seem to be.
68. I hardly ever feel pain in the back of the neck.
69. I am very strongly attracted by members of my own sex.
70. I used to like drop-the-handkerchief.
71. I think a great many people exaggerate their misfortunes in order to gain the sympathy and help of others.
72. I am troubled by discomfort in the pit of my stomach every few days or oftener.

73. I am an important person.
74. I have often wished I were a girl. (Or if you are a girl) I have never been sorry that I am a girl.
75. I get angry sometimes.
76. Most of the time I feel blue.
77. I enjoy reading love stories.
78. I like poetry.
79. My feelings are not easily hurt.
80. I sometimes tease animals.
81. I think I would like the kind of work a forest ranger does.
82. I am easily downed in an argument.
83. Any man who is able and willing to work hard has a good chance of succeeding.
84. These days I find it hard not to give up hope of amounting to something.
85. Sometimes I am strongly attracted by the personal articles of others such as shoes, gloves, etc., so that I want to handle or steal them though I have no use for them.
86. I am certainly lacking in self-confidence.
87. I would like to be a florist.
88. I usually feel that life is worth while.
89. It takes a lot of argument to convince most people of the truth.
90. Once in a while I put off until tomorrow what I ought to do today.
91. I do not mind being made fun of.
92. I would like to be a nurse.
93. I think most people would lie to get ahead.
94. I do many things which I regret afterwards (I regret things more or more often than others seem to).
95. I go to church almost every week.
96. I have very few quarrels with members of my family.
97. At times I have a strong urge to do something harmful or shocking.
98. I believe in the second coming of Christ.
99. I like to go to parties and other affairs where there is lots of loud fun.
100. I have met problems so full of possibilities that I have been unable to make up my mind about them.
101. I believe women ought to have as much sexual freedom as men.
102. My hardest battles are with myself.
103. I have little or no trouble with my muscles twitching or jumping.
104. I don't seem to care what happens to me.
105. Sometimes when I am not feeling well I am cross.
106. Much of the time I feel as if I have done something wrong or evil.
107. I am happy most of the time.
108. There seems to be a fullness in my head or nose most of the time.

109. Some people are so bossy that I feel like doing the opposite of what they request, even though I know they are right.
110. Someone has it in for me.
111. I have never done anything dangerous for the thrill of it.
112. I frequently find it necessary to stand up for what I think is right.
113. I believe in law enforcement.
114. Often I feel as if there were a tight band about my head.
115. I believe in a life hereafter.
116. I enjoy a race or game better when I bet on it.
117. Most people are honest chiefly through fear of being caught.
118. In school I was sometimes sent to the principal for cutting up.
119. My speech is the same as always (not faster or slower, or slurring; no hoarseness).
120. My table manners are not quite as good at home as when I am out in company.
121. I believe I am being plotted against.
122. I seem to be about as capable and smart as most others around me.
123. I believe I am being followed.
124. Most people will use somewhat unfair means to gain profit or an advantage rather than to lose it.
125. I have a great deal of stomach trouble.
126. I like dramatics.
127. I know who is responsible for most of my troubles.
128. The sight of blood neither frightens me nor makes me sick.
129. Often I can't understand why I have been so cross and grouchy.
130. I have never vomited blood or coughed up blood.
131. I do not worry about catching diseases.
132. I like collecting flowers or growing house plants.
133. I have never indulged in any unusual sex practices.
134. At times my thoughts have raced ahead faster than I could speak them.
135. If I could get into a movie without paying and be sure I was not seen I would probably do it.
136. I commonly wonder what hidden reason another person may have for doing something nice for me.
137. I believe that my home life is as pleasant as that of most people I know.
138. Criticism or scolding hurts me terribly.
139. Sometimes I feel as if I must injure either myself or someone else.
140. I like to cook.
141. My conduct is largely controlled by the customs of those about me.
142. I certainly feel useless at times.
143. When I was a child, I belonged to a crowd or gang that tried to stick together through thick and thin.
144. I would like to be a soldier.

145. At times I feel like picking a fist fight with someone.
146. I have the wanderlust and am never happy unless I am roaming or traveling about.
147. I have often lost out on things because I couldn't make up my mind soon enough.
148. It makes me impatient to have people ask my advice or otherwise interrupt me when I am working on something important.
149. I used to keep a diary.
150. I would rather win than lose in a game.
151. Someone has been trying to poison me.
152. Most nights I go to sleep without thoughts or ideas bothering me.
153. During the past few years I have been well most of the time.
154. I have never had a fit or convulsion.
155. I am neither gaining nor losing weight.
156. I have had periods in which I carried on activities without knowing later what I had been doing.
157. I feel that I have often been punished without cause.
158. I cry easily.
159. I cannot understand what I read as well as I used to.
160. I have never felt better in my life than I do now.
161. The top of my head sometimes feels tender.
162. I resent having anyone take me in so cleverly that I have had to admit that it was one on me.
163. I do not tire quickly.
164. I like to study and read about things that I am working at.
165. I like to know some important people because it makes me feel important.
166. I am afraid when I look down from a high place.
167. It wouldn't make me nervous if any members of my family got into trouble with the law.
168. There is something wrong with my mind.
169. I am not afraid to handle money.
170. What others think of me does not bother me.
171. It makes me uncomfortable to put on a stunt at a party even when others are doing the same sort of things.
172. I frequently have to fight against showing that I am bashful.
173. I liked school.
174. I have never had a fainting spell.
175. I seldom or never have dizzy spells.
176. I do not have a great fear of snakes.
177. My mother was a good woman.
178. My memory seems to be all right.
179. I am worried about sex matters.
180. I find it hard to make talk when I meet new people.
181. When I get bored I like to stir up some excitement.
182. I am afraid of losing my mind.
183. I am against giving money to beggars.
184. I commonly hear voices without knowing where they come from.

185. My hearing is apparently as good as that of most people.
186. I frequently notice my hand shakes when I try to do something.
187. My hands have not become clumsy or awkward.
188. I can read a long while without tiring my eyes.
189. I feel weak all over much of the time.
190. I have very few headaches.
191. Sometimes, when embarrassed, I break out in a sweat which annoys me greatly.
192. I have had no difficulty in keeping my balance in walking.
193. I do not have spells of hay fever or asthma.
194. I have had attacks in which I could not control my movements or speech but in which I knew what was going on around me.
195. I do not like everyone I know.
196. I like to visit places where I have never been before.
197. Someone has been trying to rob me.
198. I daydream very little.
199. Children should be taught all the main facts of sex.
200. There are persons who are trying to steal my thoughts and ideas.
201. I wish I were not so shy.
202. I believe I am a condemned person.
203. If I were a reporter I would very much like to report news of the theater.
204. I would like to be a journalist.
205. At times it has been impossible for me to keep from stealing or shoplifting something.
206. I am very religious (more than most people).
207. I enjoy many different kinds of play and recreation.
208. I like to flirt.
209. I believe my sins are unpardonable.
210. Everything tastes the same.
211. I can sleep during the day but not at night.
212. My people treat me more like a child than a grown-up.
213. In walking I am very careful to step over sidewalk cracks.
214. I have never had any breaking out on my skin that has worried me.
215. I have used alcohol excessively.
216. There is very little love and companionship in my family as compared to other homes.
217. I frequently find myself worrying about something.
218. It does not bother me particularly to see animals suffer.
219. I think I would like the work of a building contractor.
220. I loved my mother.
221. I like science.
222. It is not hard for me to ask help from my friends even though I cannot return the favor.
223. I very much like hunting.
224. My parents have often objected to the kind of people I went around with.
225. I gossip a little at times.
226. Some of my family have habits that bother and annoy me very much.

227. I have been told that I walk during sleep.
228. At times I feel that I can make up my mind with unusually great ease.
229. I should like to belong to several clubs or lodges.
230. I hardly ever notice my heart pounding and I am seldom short of breath.
231. I like to talk about sex.
232. I have been inspired to a program of life based on duty which I have since carefully followed.
233. I have at times stood in the way of people who were trying to do something, not because it amounted to much but because of the principle of the thing.
234. I get mad easily and then get over it soon.
235. I have been quite independent and free from family rule.
236. I brood a great deal.
237. My relatives are nearly all in sympathy with me.
238. I have periods of such great restlessness that I cannot sit long in a chair.
239. I have been disappointed in love.
240. I never worry about my looks.
241. I dream frequently about things that are best kept to myself.
242. I believe I am no more nervous than most others.
243. I have few or no pains.
244. My way of doing things is apt to be misunderstood by others.
245. My parents and family find more fault with me than they should.
246. My neck spots with red often.
247. I have reason for feeling jealous of one or more members of my family.
248. Sometimes without any reason or even when things are going wrong I feel excitedly happy, "on top of the world."
249. I believe there is a Devil and a Hell in afterlife.
250. I don't blame anyone for trying to grab everything he can get in this world.
251. I have had blank spells in which my activities were interrupted and I did not know what was going on around me.
252. No one cares much what happens to you.
253. I can be friendly with people who do things which I consider wrong.
254. I like to be with a crowd who play jokes on one another.
255. Sometimes at elections I vote for men about whom I know very little.
256. The only interesting part of newspapers is the "funnies."
257. I usually expect to succeed in things I do.
258. I believe there is a God.
259. I have difficulty in starting to do things.
260. I was a slow learner in school.
261. If I were an artist I would like to draw flowers.
262. It does not bother me that I am not better looking.
263. I sweat very easily even on cool days.

264. I am entirely self-confident.
265. It is safer to trust nobody.
266. Once a week or oftener I become very excited.
267. When in a group of people I have trouble thinking of the right things to talk about.
268. Something exciting will almost always pull me out of it when I am feeling low.
269. I can easily make other people afraid of me, and sometimes do for the fun of it.
270. When I leave home I do not worry about whether the door is locked and the windows closed.
271. I do not blame a person for taking advantage of someone who lays himself open to it.
272. At times I am all full of energy.
273. I have numbness in one or more regions of my skin.
274. My eyesight is as good as it has been for years.
275. Someone has control over my mind.
276. I enjoy children.
277. At times I have been so entertained by the cleverness of a crook that I have hoped he would get by with it.
278. I have often felt that strangers were looking at me critically.
279. I drink an unusually large amount of water every day.
280. Most people make friends because friends are likely to be useful to them.
281. I do not often notice my ears ringing or buzzing.
282. Once in a while I feel hate toward members of my family whom I usually love.
283. If I were a reporter I would very much like to report sporting news.
284. I am sure I am being talked about.
285. Once in a while I laugh at a dirty joke.
286. I am never happier than when alone.
287. I have very few fears compared to my friends.
288. I am troubled by attacks of nausea and vomiting.
289. I am always disgusted with the law when a criminal is freed through the arguments of a smart lawyer.
290. I work under a great deal of tension.
291. At one or more times in my life I felt that someone was making me do things my hypnotizing me.
292. I am likely not to speak to people until they speak to me.
293. Someone has been trying to influence my mind.
294. I have never been in trouble with the law.
295. I liked "Alice in Wonderland" by Lewis Carroll.
296. I have periods in which I feel unusually cheerful without any special reason.
297. I wish I were not bothered by thoughts about sex.
298. If several people find themselves in trouble, the best thing for them to do is to agree upon a story and stick to it.
299. I think that I feel more intensely than most people do.

300. There never was a time in my life when I liked to play with dolls.
301. Life is a strain for me much of the time.
302. I have never been in trouble because of my sex behavior.
303. I am so touchy on some subjects that I can't talk about them.
304. In school I found it very hard to talk before the class.
305. Even when I am with people I feel lonely much of the time.
306. I get all the sympathy I should.
307. I refuse to play some games because I am not good at them.
308. At times I have very much wanted to leave home.
309. I seem to make friends about as quickly as others do.
310. My sex life is satisfactory.
311. During one period when I was a youngster I engaged in petty thievery.
312. I dislike having people about me.
313. The man who provides temptation by leaving valuable property unprotected is about as much to blame for its theft as the one who steals it.
314. Once in a while I think of things too bad to talk about.
315. I am sure I get a raw deal from life.
316. I think nearly anyone would tell a lie to keep out of trouble.
317. I am more sensitive than most other people.
318. My daily life is full of things that keep me interested.
319. Most people inwardly dislike putting themselves out to help other people.
320. Many of my dreams are about sex matters.
321. I am easily embarrassed.
322. I worry over money and business.
323. I have had very peculiar and strange experiences.
324. I have never been in love with anyone.
325. The things that some of my family have done have frightened me.
326. At times I have fits of laughing and crying that I cannot control.
327. My mother or father often made me obey even when I thought it was unreasonable.
328. I find it hard to keep my mind on a task or job.
329. I almost never dream.
330. I have never been paralyzed or had any unusual weakness of any of my muscles.
331. If people had not had it in for me I would have been much more successful.
332. Sometimes my voice leaves me or changes even though I have no cold.
333. No one seems to understand me.
334. Peculiar odors come to me at times.
335. I cannot keep my mind on one thing.
336. I easily become impatient with people.
337. I feel anxiety about something or someone almost all the time.
338. I have certainly had more than my share of things to worry about.

339. Most of the time I wish I were dead.
340. Sometimes I become so excited that I find it hard to get to sleep.
341. At times I hear so well it bothers me.
342. I forget right away what people say to me.
343. I usually have to stop and think before I act even in trifling matters.
344. Often I cross the street in order not to meet someone I see.
345. I often feel as if things were not real.
346. I have a habit of counting things that are not important such as bulbs on electric signs, and so forth.
347. I have no enemies who really wish to harm me.
348. I tend to be on my guard with people who are somewhat more friendly than I had expected.
349. I have strange and peculiar thoughts.
350. I hear strange things when I am alone.
351. I get anxious and upset when I have to make a short trip away from home.
352. I have been afraid of things or people that I knew could not hurt me.
353. I have no dread of going into a room by myself where other people have already gathered and are talking.
354. I am afraid of using a knife or anything very sharp or pointed.
355. Sometimes I enjoy hurting persons I love.
356. I have more trouble concentrating than others seem to have.
357. I have several times given up doing a thing because I thought too little of my ability.
358. Bad words, often terrible words, come into my mind and I cannot get rid of them.
359. Sometimes some unimportant thought will run through my mind and bother me for days.
360. Almost every day something happens to frighten me.
361. I am inclined to take things hard.
362. I am more sensitive than most other people.
363. At times I have enjoyed being hurt by someone I loved.
364. People say insulting and vulgar things about me.
365. I feel uneasy indoors.
366. Even when I am with people I feel lonely much of the time.
367. I am not unusually self-conscious.
368. At periods my mind seems to work more slowly than usual.
369. At parties I am more likely to sit by myself or with just one other person than to join in with the crowd.
370. People often disappoint me.
371. I love to go to dances.
372. I have sometimes felt that difficulties were piling up so high that I could not overcome them.
373. I often think, "I wish I were a child again."
374. If given the chance I could do some things that would be of great benefit to the world.

375. I have often met people who were supposed to be experts who were no better than I.
376. It makes me feel like a failure when I hear of the success of someone I know well.
377. If given the chance I would make a good leader of people.
378. I am embarrassed by dirty stories.
379. People generally demand more respect for their own rights than they are willing to allow for others.
380. I try to remember good stories to pass them on to other people.
381. I enjoy gambling for small stakes.
382. I enjoy social gatherings just to be with people.
383. I enjoy the excitement of a crowd.
384. My worries seem to disappear when I get into a crowd of lively friends.
385. I am quite often not in on the gossip and talk of the group I belong to.
386. I find it hard to set aside a task that I have undertaken, even for a short time.
387. I have had no difficulty starting or holding my urine.
388. I have often found people jealous of my good ideas, just because they had not thought of them first.
389. Whenever possible I avoid being in a crowd.
390. I do not mind meeting strangers.
391. I can remember "playing sick" to get out of something.
392. While in trains, busses, etc., I often talk to strangers.
393. I feel like giving up quickly when things go wrong.
394. I like to let people know where I stand on things.
395. I have had periods when I felt so full of pep that sleep did not seem necessary for days at a time.
396. In a group of people I would not be embarrassed to be called upon to start a discussion or give an opinion about something I know well.
397. I like parties and socials.
398. I shrink from facing a crisis or difficulty.
399. I am apt to pass up something I want to do when others feel that it isn't worth doing.

APPENDIX II

Wechsler Adult Intelligence Scale
Vocabulary Subtest

APPENDIX II

WECHSLER ADULT INTELLIGENCE SCALE

VOCABULARY SUBTEST

1. Bed
2. Ship
3. Penny
4. Winter
5. Repair
6. Breakfast
7. Fabric
8. Slice
9. Assemble
10. Conceal
11. Enormous
12. Hasten
13. Sentence
14. Regulate
15. Commence
16. Ponder
17. Caveyn
18. Designate
19. Domestic
20. Consume
21. Terminate
22. Obstruct
23. Remorse
24. Sanctuary
25. Matchless
26. Reluctant
27. Calamity
28. Fortitude
29. Tranquil
30. Edifice
31. Compassion
32. Tangible
33. Perimeter
34. Audacious
35. Ominous
36. Tirade
37. Encumber
38. Plagiarize
39. Impale
40. Travesty

APPENDIX III

'Qualitative Analysis of Verbal Responses
to the Wechsler Adult Intelligence Scale'

APPENDIX III
 QUALITATIVE ANALYSIS OF VERBAL RESPONSES
 TO THE WECHSLER ADULT INTELLIGENCE SCALE

- A. A. Surkis, 1963 -

<u>Code</u>	<u>Schema</u>	<u>Level</u>
S	Synonym Unmodified	[Abstract, Conceptual LEVEL 3]
SU	" Modified by Use	
SD	" " " Description	
SDE	" " " Degree	
FOC	Formal Classification	
FUC	Functional Classification	
P	Paraphrase	
OU	Objective Use	[Functional LEVEL 2]
E	Explanation	
D	Description	
ED	Explanation and Description	
RC	Repetition in Context	[Concrete LEVEL 1]
F	Function (Subjective Use)	
G	Demonstration	
I	Illustration	
IE	Inferior Explanation	
W	Incorrect Definition	[Incorrect LEVEL 0]
M	Misinterpretation	
C	Clang Association	
R	Repetition Without Context	
O	Omission	

EXAMPLES OF DEFINITIONS AND CODING

LEVEL 3Synonym Unmodified

Regulate: control, organize, schedule
Tranquil: quiet, calm
Commence: begin, initiate

Synonym Modified by Use

Bed: a cot you sleep in
Penny: cent you save
Cavern: a hole, rather a cave you hide in

Synonym Modified by Description

Ship: a boat with sails
Edifice: a large steel and glass building
Sanctuary: a quiet sacred place

Synonym Modified by Degree

Ominous: very threatening
Reluctant: very hesitant, most unwilling
Tranquil: very serene

Formal Classification

Bed: furniture
Breakfast: a meal
Edifice: an architectural structure

Functional Classification

Sentence: a means of punishment
Regulate: a means of control
Fabric: protective covering

Paraphrase

Compassion: feeling sorry but feeling with someone
 Tangible: materially evident
 Travesty: warping the real sense of something

LEVEL 2Objective Use

Bed: to sleep in
 Penny: you spend it
 Chair: used to sit in

Explanation

Designate: you choose a leader
 Terminate: when you stop doing something
 Reluctant: a feeling you have of not wanting to do something

Description

Reluctant: sort of slow to do something
 Audacious: a sassy sort of person
 Tirade: yelling like a fish wife

Explanation and Description

Audacious: nervy to the point of being rude
 Tranquil: happy and relaxed
 Winter: when it is cold and it snows

LEVEL 1Repetition in Context

Hasten: hasten to work
 Ponder: pondering about something
 Reluctant: when you are reluctant to do something

Function (Subjective Use)

Cavern: I hide there
 Fabric: I wear it
 Breakfast: we eat it

Illustration

Slice: a piece of bread
 Enormous: like a blown-up clown
 Ominous: a black cloud before a storm

Inferior Explanation

Travesty: a joke that is unfair
 Plagiarize: to lie about something you have written
 Encumber: add trouble to trouble

LEVEL 0Incorrect Definition

Matchless: without matches
 Conceal: to close up
 Hasten: pure

Misinterpretation

Fortitude: a place to shoot from
Ponder: like a teddy bear
Conceal: a type of animal

Clang Association

Terminate: a termite
Remorse: resource
Tangible: tangerine

Repetition Without Context

Hasten: hasten
Sanctuary: sanctuary
Tranquil: tranquil

Appendix IV, Examples of Profiles on M.M.P.I.-
Obsessive-Compulsive and Hysterical, pp. 75-77,
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VITA AUCTORIS

- 1952 Born January 26 in Rochester, New York to Richard and Mary Meyer.
- 1965 Enrolled at Aquinas Institute of Rochester
- 1969 Graduated from Aquinas Institute with New York State Regents Diploma
- 1969 Enrolled as a full-time undergraduate student at the University of Windsor, Ontario
- 1973 Awarded Honours B.A. in Psychology at the University of Windsor, Ontario
- 1973 Registered as a full-time graduate student in Clinical Psychology at the University of Windsor, Ontario