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Normal Hysterical and Normal Obsessive-Compulsive Personality Styles: A Rerospective Study of Developmental Correlates

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NORMAL HYSTERICAL AND NORMAL OBSESSIVE-COMPULSIVE
PERSONALITY STYLES: A RETROSPECTIVE STUDY
OF DEVELOPMENTAL CORRELATES

by

Mark Joseph Groberski

A Thesis Submitted to the Faculty of the Graduate School
of Loyola University of Chicago in Partial Fulfillment
of the Requirements for the Degree of
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VITA

The author, Mark Joseph Groberski, is the son of the late Edward A. Groberski and Pauline (Dandurand) Groberski. He was born on June 4, 1956 in Chicago, Illinois.

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CHAPTER I

INTRODUCTION

A very broad question of long-standing interest, both to the current researcher as well as to others, has been: How do people come to be the way they are? While it is today commonly held, and almost trite to note, that both environmental and constitutional factors contribute to personality development, at one time personality development research was marked by positions of relative emphasis on one or the other of these factors. This controversy has given way over the years to a more sophisticated interactionalism. As Ausubel, Sullivan, and Ives (1980) have noted,

The pseudo-issue underlying the controversy can only be eliminated by specifying in more precise and detailed fashion how the interaction takes place and the relative weight of each factor in determining the course and outcome of particular kinds of development (p. 35).

Thus, a relevant focus for current studies of personality development would be on the components of interaction and their relative degrees of emphasis.

Components of interaction in development produce an underlying personality structure which may predispose the individual to psychopathological entities. Thus, any given personality style may develop into an inflexible, maladaptive extreme (termed a personality disorder); develop a constellation of symptoms, such as seen in neurosis

or psychosis; or develop within the "normal", adaptive range of functioning. Most of the work on the hysterical and the obsessive personality (the personality styles to be studied here) has been in the area of psychopathology, both in terms of samples and theoretical conceptualizations. Therefore, since the bulk of the literature has focused on pathological manifestations, the focus in the present investigation will be on the manifestations of these styles within normal limits.

Two particular personality (or character) styles were chosen for study, the hysterical and the obsessive-compulsive (or more simply, obsessive). Personality style here refers to a collection or combination of characteristics that are broadly representative of an individual. The hysterical and the obsessive styles were selected for study because they represent contrasting characteristics. In terms of behavior, cognition, and emotion, these two styles are, in a sense, "flip sides of the same coin." In addition to the sharp contrasts between the styles, a considerable literature has developed around them, such that a study of their developmental correlates would be of interest. However, while a great deal of attention has been focused on theoretical/descriptive aspects of these styles (as well as, though to a lesser extent, theoretical treatments of the impact of parenting), there has been less emphasis on empirical investigation of relevant developmental variables and their interrelationship.

The influences of a number of variables on development in general have been studied over the years. Important social-

environmental variables have included birth order and parenting styles. The impact of a constitutional variable such as temperament has also been considered significant to examine in studies of development. The literature that has evolved around these three variables attests to their significance as research foci. Another family structure variable, family density, has not received the attention of the others but seems to exhibit potential for better understanding the impact of family constellation.

The relationship of these social and constitutional variables to the development of hysterical and obsessive styles has received some attention theoretically, and uneven and scattered attention empirically. Theoretical or empirical treatments of the influence of these variables have tended to focus on one variable to the exclusion of others, thereby not accounting for alternate, interacting influences. The present study will seek to examine these developmental components, both alone and in interaction.

In the course of this study, research subjects will be classified into one of three groups: Hysterical Personality Style, Obsessive Personality Style, and Blended Personality Style (a control group composed of persons who do not demonstrate a strong inclination toward either an hysterical or an obsessive personality style). These individuals will be classified into their respective groups on the basis of scores on three measures: The Lazare-Klerman Trait Scales (LKTS) (Lazare, Klerman, & Armor, 1966, 1970); the Millon Multiaxial Clinical Inventory (MMCI) (Millon, 1977)--Gregarious-Histrionic and Conforming-Compulsive scales; and the Myers-Briggs Type Indicator

(MBTI) (Myers, 1962).

Following classification, these people will be requested to complete a sheet detailing their and their sibling's birth-dates (in order to gain birth order and family density information) and a retrospective questionnaire measuring perceived parenting styles of both mothers and fathers, the Parent-Child Relations Questionnaire II (Siegelman & Roe, 1979). Finally, these selected subjects will be asked to have one of their parents, preferably the parent who was the subject's primary caretaker during his or her first year of life, complete a questionnaire which measures the nine temperament categories derived by Thomas, Chess, and Birch (1968), the revised Infant Temperament Questionnaire (Carey & McDevitt, 1977). With this data, it will be possible to mount an investigation of the individual and the relative influence of these variables (i.e., birth order, family density, parenting styles, and temperament) on development into either an hysterical or an obsessive personality style.

In summary, earlier controversies over the relative importance of social or constitutional variables in personality development have been resolved over the years in the direction of a more sophisticated interactionism. The interacting influences of such variables may produce a personality structure that is either "normal" and adaptive or abnormal and maladaptive. The particular personality styles chosen for study here, the hysterical and the obsessive, have been examined primarily in their abnormal manifestations. However, the current investigation will study these styles within the adaptive range of functioning.

Different social (birth order, parenting styles, and, to a lesser extent, family density) and constitutional (temperament) variables have been studied in relation to development. However, little systematic attention has been paid to these variables in relation to the development of an hysterical or an obsessive style. What work has been done has tended to focus on one variable to the exclusion of the others. While the influence of individual variables will be examined here, the study will also focus on the relative contributions of social and constitutional variables in the development of hysterical and obsessive styles. A retrospective method will be employed in the investigation.

In the following chapter, literature regarding the hysterical and the obsessive personality styles will be reviewed in order to introduce and describe those concepts. The literature concerning the four dependent development variables (birth order, family density, parenting style, and temperament) of the current study will then be examined. An overview of the current status of the variable will be presented, followed by a review of theoretical and empirical treatments of that variable's relation to the development of hysterical or obsessive personality.

CHAPTER II

REVIEW OF THE RELATED LITERATURE

Hysterical Personality Style

The intent of this section is to offer a description of the hysterical personality style. For the purposes of this paper, the following will serve as a capsulized version of the hysterical style drawn from the material more fully discussed in the following pages.

The hysterical style seems to be characterized by an emotional, dramatic, often histrionic presentation. Emotionality is often labile. Such an individual is usually socially adept, exhibitionistic, self-focused, and dependent on others for attention and approval. Sexually seductive features are often present. Cognitive style is marked by repressive, diffuse, global, impressionistic qualities and the individual often has a romantic view of the world. Such persons are not intellectually-inclined and although entertaining, may be seen as shallow.

As stated previously, research subjects in the current study will be classified into an Hysterical Personality Style group based on scores on three measures. The measures used were the Hysterical factor of the LKTS (Lazare et al., 1966, 1970), the Gregarious-Histrionic scale of the MMCI (Millon, 1977), and the MBTI (Myers, 1962). The first two instruments directly measure aspects of the

hysterical personality. The MBTI produces a type score based on preferences along four different dimensions. The MBTI type score may be seen as representing a type that is either consistent or inconsistent with descriptive features of the hysterical style.

Theoretical material and empirical evidence regarding the concept of the hysterical personality will be reviewed in this section in an effort to more fully describe the style. Since the concept developed within the framework of psychoanalysis, the literature has a very heavy emphasis on abnormal populations, both in terms of samples and in terms of language (i.e., jargon). Also, since the notion of hysterical personality evolved first within a theoretical context, and was followed by empirical research, the major historical perspective will be derived from the theory section.

Theoretical Contributions

Hysteria is a psychopathological syndrome encompassing conversion reactions, dissociated states of consciousness, and numerous physical complaints that have no organic basis. The existence of this syndrome has been recognized for centuries (Veith, 1970, 1977). However, hysteria is a cluster of symptoms and is to be distinguished from hysterical personality style, which is a constellation of certain patterns of behavior, cognition, and emotion. Such a personality style may be manifested within an adaptive or an extreme, caricaturized, maladaptive range of functioning. As will be seen, the lack of precision with which these terms have been used over the years has contributed to a lack of definitional clarity.

The concept of hysterical personality has its roots in psychoanalysis, although Freud himself never specifically delineated such a character style. Freud's work (Breuer & Freud, 1893-1895/1955; Freud, 1896/1962) dealt with the psychopathological syndrome of hysteria. In 1931, Freud's discussion of three character types based on level of libidinal development introduced an erotic type that paralleled current descriptions of hysterical style. Thus, for the erotic type, loving and being loved were all-important. A fear of loss of love made this type very dependent on others and the ego and the superego were considered to be in a "docile" position relative to the id.

It was with the work of Wittels (1930) and Reich (1933/1969) that the concept of hysterical personality per se was first directly addressed. However, the two theorists assumed differing positions. Wittels (1930) viewed individuals with an hysterical personality as unreliable, not needing to complete things, tending to live in fantasy, and exercising poor impulse control. He described the character style as "infantile and feminine" and as manifesting an infantile-level fixation. Thus, Wittels (1930) conceived of the hysterical personality as a regressed, fairly primitive, impulsive character structure.

In contrast, Reich (1933/1969) considered the hysterical personality to result from ". . .a fixation in the genital phase of childhood development, with its incestuous attachment" (p. 206). Primary characteristics of this style were "an importunate sexual attitude" (Reich, 1933/1969, p. 204), combined with "a specific kind of physical ability exhibiting a distinct sexual nuance" (p. 204).

Also seen as characteristic were coquetry in women, and, in men, softness, excessive politeness, and feminine facial expression and bearing. Other qualities included shyness; anxiousness (particularly when sexual behavior seemed near) accompanied by subsequent passivity; rapid shifting of attitudes; strong suggestibility; and a vivid imagination that could lead to "pseudologia," that is, "fantasized experiences. . . reproduced and grasped as real experiences" (Reich, 1933/1969, p. 205). Genital impulses were strong yet ungratified due to genital anxiety.

Fenichel (1945) viewed hysterical personality as a manifestation of traits that corresponded to two conflicts seen in hysteria. The first conflict was between a strong fear of sexuality and strong, although repressed, sexual strivings. The second was between "introversion" (a rejection of actuality; a turning from reality to fantasy) and ". . .the tendency to find the infantile objects again in the actual environment" (Fenichel, 1945, p. 527). Hysterical personalities were described as: tending to sexualize all nonsexual relationships; suggestible; and exhibiting irrational emotional outbursts, chaotic behavior, dramatization, and histrionics.

By the 1950s, the concept of hysterical personality was surrounded by definitional confusion. Chodoff and Lyons (1958) noted that the term "hysteria" had at least five connotations:

1. a pattern of behavior habitually exhibited by certain individuals who are said to be hysterical personalities or hysterical characters;
2. a particular kind of psychosomatic symptomatology called conversion hysteria or conversion reaction;
3. a psychoneurotic disorder characterized by phobias and/or certain anxiety manifestations--called anxiety hysteria;
4. a particular psychopathological pattern;
5. a term of approbrium

(p. 734).

While the five connotations were not contradictory, neither were they necessarily mutually exclusive. For the most part, they referred to different types of phenomena. Hence, Chodoff and Lyons consulted various authorities and abstracted definitions agreed upon by most authors. Their description of hysterical personality was confined to observable behavior, rather than underlying psychodynamics:

. . .the hysterical personality is a term applicable to persons who are vain and egocentric, who display labile and excitable but shallow affectivity, whose dramatic, attention seeking and histrionic behavior may go to the extremes of lying and even pseudologia phantastica, who are very conscious of sex, sexually provocative yet frigid, and who are dependently demanding in interpersonal situations (Chodoff & Lyons, 1958, p. 7326).

Easser and Lesser (1965) offered their own reconceptualization of the concept of hysterical personality after noting, "The terms hysteria, hysterical character, etc., are so loosely defined and applied so promiscuously that their application to diagnostic categories has become meaningless" (p. 392). They therefore determined to clarify and better delineate the concept by presenting seven traits that they considered indicative of the hysterical personality. The first was labile emotionality, followed by direct, active engagement with people. Third was poor response to frustration, coupled with overexcitability. Next was a close relationship between excitability and its derivative fantasy. Suggestibility was the fifth characteristic. The sixth was a distaste for and avoidance of detailed, rote, exact, mundane activities. Finally, Easser and Lesser (1965) indicated that there was a close relationship between hysterical irresponsibility and ". . .the maintenance of her self-presentation as a child-

woman" (p. 397).

Aspects of cognition in the hysterical personality have been described by Schafer (1954) and Shapiro (1965). Schafer (1954) discussed the reliance on repression as the major mechanism of defense, with subsequent ego constriction and immaturity. Again, emotional experience was seen as labile and diffuse and actions were viewed as impulsive. He also noted the impairment in intellectual functioning. Cognitive activity was viewed as threatening for this style because thoughts and fantasies offered ". . . a potential channel of expression of rejected impulses. . ." (Schafer, 1954, p. 194).

Shapiro (1965) offered an in-depth phenomenological analysis of cognitive functioning in the hysterical personality. Such individuals were characterized by the use of a global, diffuse, impressionistic cognitive style, which led them to respond to the immediately striking. Shapiro (1965) believed that the combination of this impressionistic cognitive style with the typical marked incapacity for concentration facilitated repression in two ways:

First, the original cognition is not sharply, factually defined and is not likely to be logically coordinated with other facts . . . but is impressionistic. . . and highly susceptible to displacement by or fusion with other previous or subsequent impressions. Second, the relative incapacity for sharply focused attention and concentration and the passive, impressionistic, distractible nature of the cognitive style may be assumed to hold for the recollection process also and to make clear, sharp, factual recollection unlikely under the best of circumstances. . . (p. 117).

Shapiro also considered romance, fantasy, and emotion in the hysterical personality. Individuals who exhibit such a style typically have a romantic outlook and remember in a nostalgic, idealized

manner that reflects their impressionability and that lacks factual detail. They thus often idealize their partners and do not notice objective flaws. They do not search the environment for information but rather, are struck by things. Hence, while the person's subjective world is colorful, it usually lacks substance and fact. Those with an hysterical personality tend to relate to reality as if things do not count or are not serious. Finally, Shapiro (1965) noted the unwittingly exaggerated, unconvincing quality of emotional expression, indicating the ease with which individuals with an hysterical style are "carried away" by vivid internal or external phenomena. Since they experience emotions as an "alien force" that takes possession of them, strong affects are subjectively perceived as not having really been felt.

Millon, an important current theorist, has offered a perspective on the hysterical personality that is removed from a psychodynamic framework. Millon and Millon (1974) reconceptualized the hysterical personality style as an "active-dependent" pattern. Such a personality style was marked by an active seeking of reinforcement. Individuals who manifest this style were viewed as actively manipulating interpersonal relationships to acquire stimulation and esteem. Their extreme sensitivity to the thoughts and moods of others enabled them to determine what responses will guarantee them their desired response. They thus lack loyalty, since they frequently move from one source of affection and approval to another. Dissatisfaction with single attachments, in conjunction with a strong need for attention and stimulation, was seen as resulting in a seductive behavior pattern

and a propensity for the dramatic (Millon & Millon, 1974). Central features were:

. . . labile affectivity (uncontrolled and dramatic expression of emotions), cognitive dissociation (failure to integrate learnings; massive repression of memories), sociable self-image (perception of self as attractive, charming, and affectionate) and interpersonal seductiveness (a need to flirt and seek attention) (Millon & Millon, 1974, p. 240).

The theoretical literature is replete with other contributions that essentially reconfirm characteristics that have already been noted (Allen & Houston, 1959; Blacker & Tupin, 1977; Halleck, 1967; Hollender, 1971; Horowitz, 1977). Alarcon (1973) surveyed 22 authors who had written on the hysterical personality over 22 years. Of 14 papers that cited six or more characteristics, Alarcon (1973) chose to designate as characteristics of the hysterical personality those features that had been listed by seven or more authors (see Appendix A).

In the interests of completing the historical perspective on the development of the hysterical personality, it is worthwhile to note that the differing positions regarding developmental level taken by Wittels (1930) (hysterical personality as a primitive character structure) and Reich (1933/1969) (hysterical personality as a genitally-fixated character structure) continued over the years. Easser and Lesser (1965) first proposed a formal division into "hysterical" (healthier) and "hysteroid" (lower-level) categories. However, Zetzel (1968) revised and explained this dichotomy more fully. She placed female patients on a continuum ranging from most to least analyzable and based differentiations on the achievement of certain

developmental tasks. Contemporary with this was Kernberg's (1967) comparison of hysterical and infantile personalities. Lazare (1971) drew on these sources and presented composites of high- and low-level hysterical personality structures.

Recently, Krohn (1978) has been the first to put forward a comprehensive ego psychological conceptualization of the hysterical personality. He presented a scholarly, in-depth review of the development of the concept and offered a description of the hysterical ego in terms of cognitive style, ego style, ego structure, affective experience, primary defenses, nature of relationships, experience of objects, superego structure, and relationships with social reality. Krohn also discussed hysterical personality both as an abnormal as well as a normal phenomenon. The one other theoretical treatment of normal hysterical personality style was that of Zisook and DeVaul (1978), in which they examined the healthier end of the continuum posited by Lazare (1971).

In summary, the history of the concept of hysterical personality has been characterized by confusion and lack of definitional clarity. The terms "hysteria" and "hysterical personality" have often been used interchangeably in an inappropriate manner, although it now seems that there is some stable sense of the features of an hysterical character. In addition, the literature has been characterized by an emphasis on the abnormal, both in terms of populations studied and the language used to describe personality.

Empirical Studies

While several measures of hysterical personality are currently available, Pollack (1981) noted that there is no widely accepted measure and that many current instruments lack adequate normative data and/or reliability and validity information necessary to make an informed choice. The MMPI's scale 3, labeled "Hysteria," is not so much a measure of hysterical personality as it is a measure of propensity for denial and conversion reactions. Caine and Hawkins (1963) developed the Hysteroid-Obsessoid Questionnaire, which assumes that hysterical and obsessive traits are opposite ends of a single continuum. The Middlesex Hospital Questionnaire (Crown & Crisp, 1970) attempts to delineate different types of clinical disturbances. Scale 6 of this measure is labeled "Hysteria" and is designed to measure personality traits thought to underlie hysterical symptom formation. The MMCI (Millon, 1977) has the Gregarious-Histrionic scale, while Lazare et al. (1966, 1970) presented a factor-analytically derived instrument.

However, a major problem with developing measures is that there is no clear empirical consensus regarding exactly what hysterical personality is. In his recent review, Pollak (1981) indicated that, as a scientific construct, hysterical personality has not yet been adequately documented. Factor analytic techniques have been utilized in an effort to better define the construct. Finney (1961) derived a factor labeled "hysterical character or repression." The highest loadings were on Wiener's (1948) "subtle" Hysteria subscale, which tapped repression and denial, and on an experimental scale, "Rep,"

which additionally tapped histrionic dramatization.

The "most noteworthy" (Pollak, 1981) work bearing directly on factor-analytically defining the construct of hysterical personality has been done by Lazare et al. (1966, 1970). The hysterical factor in the first study was comprised of seven traits: aggression, emotionality, oral aggression, exhibitionism, egocentricity, sexual provocativeness, and dependence. Lazare et al.'s second factor analysis in 1970 produced an hysterical factor composed of aggression, emotionality, oral aggression, obstinacy, exhibitionism, and egocentricity. Paykel and Prusoff's (1973) factor analysis of Lazare et al.'s items produced an hysterical factor of the following traits: oral aggression, aggression, sexual provocativeness, obstinacy, exhibitionism, and emotionality. Finally, van den Berg and Helstone (1975) replicated Lazare et al.'s original work with a Dutch sample and found an hysterical factor made up of oral aggression, aggression, exhibitionism, sexual provocativeness, egocentricity, and emotionality. However, the above results notwithstanding, more factor analytic research, especially with normal groups, needs to be carried out in order to cross-validate findings and better define the parameters and characteristics of hysterical personality style.

The factor analytic findings, taken in conjunction with other empirical findings, allow for a compilation of descriptors regarding the hysterical personality. Hence, evidence has accrued indicating the use of repression (Blinder, 1966; Finney, 1961; O'Neill & Kempler, 1969) and denial (Blinder, 1966; Finney, 1961) in the hysterical personality. In addition, histrionic dramatization (Blinder, 1966;

Finney, 1961; Slavney & McHugh, 1974), emotionality (Lazare et al., 1966, 1970; Paykel & Prusoff, 1973; van den Berg & Helstone, 1975), and emotional lability (Rabins & Slavney, 1979; Slavney, Breitner, & Rabins, 1977) also seem to be characteristics of the hysterical style. Other plausible features include aggressiveness (Lazare et al., 1966, 1970; Paykel & Prusoff, 1973; van den Berg & Helstone, 1975), oral aggressiveness (Lazare et al., 1966, 1970; Paykel & Prusoff, 1973; van den Berg & Helstone, 1975), exhibitionism (Lazare et al., 1966, 1970; Paykel & Prusoff, 1973; van den Berg & Helstone, 1975), sexual provocativeness (Lazare et al., 1966, 1970; Paykel & Prusoff, 1973; van den Berg & Helstone, 1975), and egocentricity (Lazare et al., 1966, 1970; Paykel & Prusoff, 1973; van den Berg & Helstone, 1975).

Studies employing experimental manipulations have been performed (Jordan & Kempler, 1970; O'Neill & Kempler, 1969) in investigating the responses of persons with hysterical personalities. O'Neill and Kempler (1969) found support for the notion that females with hysterical personalities are sensitive to sexual cues under sexually neutral conditions, but selectively attentive and avoidant of sexual stimuli under sexually provocative conditions. Jordan and Kempler (1970) found that female subjects with hysterical personalities were particularly sensitive to negative judgments made about their sex-role adequacy.

Pollack (1981) concluded his review of the hysterical personality by indicating that a great deal of empirical research is needed since most information regarding this style has been derived from case histories and theoretical contributions. The most pressing needs

were to better define the construct empirically and to devise more valid and reliable measures. In addition, most conclusions have been based on abnormal groups, with a few exceptions (Jordan & Kempler, 1970; O'Neill & Kempler, 1969; Rabins & Slavney, 1979; Slavney et al., 1977). Thus, there is a need for research focused on better defining the parameters of hysterical personality within a normal population. The qualities descriptive of hysterical personality within a normal or abnormal population are a matter of degree. One would therefore expect to find the same characteristics within a normal sample, to a lesser degree than in a normal sample, but nevertheless still dominating the style of personality.

Obsessive Personality Style

A definition of obsessive personality style, abstracted from the fuller description to follow, will be presented here in order to introduce this concept. The obsessive style is typically marked by a nonemotional, controlled exterior. The individual is usually dependable and concerned with doing what is proper. Interpersonally, a certain rigidity is often evident. Persons with an obsessive personality are not socially ascendant, but rather, introverted, and prefer the world of thoughts and ideas to that of emotions and social contacts. The cognitive style associated with obsessive personality is typically marked by a focus on technical, factual details and rigidity. Orderliness, parsimony, and obstinacy also blend into the picture.

As stated earlier, scores on three measures were used to classify research subjects into an Obsessive Personality Style group. The

instruments that were used were the LKTS Obsessive factor (Lazare et al., 1966, 1970), the MMCI Conforming-Compulsive scale (Millon, 1977), and the MBTI (Myers, 1962).

As with the hysterical personality, the obsessive personality developed first within the framework of theory; relevant research followed. Hence, the historical perspective on this construct's development will also be apparent in the section dealing with theoretical contributions. The definitional elaborations over time that characterize the literature on the hysterical personality are relatively absent in the obsessive personality literature, since there has been little change in the concept since its inception (Pollak, 1979; Salzman & Thaler, 1981). Thus, the concept of obsessive personality was formulated more clearly and earlier than the hysterical personality. One might speculate that a reason for the earlier, clearer delineation of obsessive characteristics was a subjective understanding of the obsessive personality on the part of the early authors, based perhaps on their own character traits. Early works (Abraham, 1921/1953; Freud, 1908/1960; Jones, 1918/1960) are remarkably penetrating and lucid in their accounts of this style.

Theoretical Contributions

Obsessive personality was first formulated in a coherent fashion by Freud (1908/1960) as the "anal-erotic" character. A cluster of three traits were linked together:

The people. . .are noteworthy for a regular combination of the three following characteristics. They are especially orderly, parsimonious, and obstinate. Each of these words actually covers a small group or series of interrelated character-traits.

"Orderly" covers the notion of bodily cleanliness, as well as of conscientiousness in carrying out small duties and trustworthiness. . . Parsimony may appear in the exaggerated form of avarice; and obstinacy can go over into defiance, to which rage and revengefulness are easily joined. The latter two qualities. . . are linked with each other more closely than they are with the first. . . They are, also, the more constant element of the whole complex. Yet it seems to me incontestable that all three in some way belong together (Freud, 1908/1960, p. 169).

Freud posited that individuals with an anal-erotic character had been born with a strong anal sensitivity, an "erotogenicity of the anal zone" (Freud, 1908/1960, p. 170), such that as young children they had experienced the holding back of stool and defecation as pleasurable. However, as they matured, indulgence in such pleasures was discouraged and they had to deny and repress their urges. Shame, disgust, and morality, formed during latency as a "dam" against anal urgings, functioned as reaction-formations against their original impulses. Such anal impulses strove for uninhibited defecation and the expression of impulses to dirty. These anal strivings were viewed as repressed and sublimated into the above three character traits.

Orderliness (and its associated characteristics, cleanliness and trustworthiness) was viewed as a reaction-formation against interest in ". . . what is unclean and disturbing and should not be a part of the body" (Freud, 1908/1960, p. 172). Obstinacy was not seen as a sublimation but rather as a persisting response derived from the frustration of anal impulses experienced during toilet-training. Since money was viewed as equated with feces in the unconscious, parsimony was conceived as a sublimated way to maintain contact with

fecal material. Thus, Freud (1908/1960) concluded that ". . .character. . .is formed out of the constituent instincts" (p. 175). Character traits were ". . .either unchanged prolongations of the original instincts, or sublimations of those instincts, or reaction-formations against them" (Freud, 1908/1960, p. 175). Later elaborations were contributed by Jones (1918/1960), Abraham (1921/1953), Reich (1933/1969), and Fenichel (1945).

A more modern ego psychological view emphasizes the theme of control over the environment and avoidance of the feeling of weakness. Salzman (1968) stated that the need for control was a means of avoiding any thoughts or feelings that might result in a feeling of weakness, not a means of controlling forbidden aggressive or sexual drives, as a psychoanalytic position would hold. Thus, Salzman (1968) stated:

The primary dynamism in all instances will be manifested as an attempt to gain control over oneself and one's environment in order to avoid or overcome distressful feelings of helplessness. The concern about the possibility of losing control by being incompetent, insufficiently informed, or unable to reduce the risks of living produces the greatest amounts of anxiety. The realization of one's humanness--with its inherent limitations--is often the basis for considerable anxiety and obsessive attempts at greater control over one's living (p. 16).

The issue of control is further complicated by the tendency of persons with an obsessive style to deal in extremes. Hence, if such individuals do not feel in control, they feel a total lack of control. A need for omniscience via intellectual pursuits is often demonstrated in order to maintain a firm sense of control.

Millon, an important current theorist, viewed the obsessive

personality as manifesting a "passive-ambivalent pattern" (Millon & Millon, 1974, p. 259). The conflict between an intense, unconscious desire for self-assertion and a conscious submission to others was discussed. Individuals with obsessive personalities were seen as rigidly controlling their strivings for assertiveness in order to maintain supports. Four features were viewed as descriptive of this style:

restrained affectivity (emotionally controlled; grim and cheerless), cognitive constriction (narrow-minded; overly methodical and pedantic in thinking), conscientious self-image (practical, prudent and moralistic), and interpersonal respectfulness (ingratiating with superiors; formal and legalistic with subordinates) (Millon & Millon, 1974, p. 263).

Building on the defensive operations discussed by Fenichel (1945), Schafer (1954) discussed the defenses typical of the obsessive-compulsive character and neurotic (i.e., regression, isolation, reaction-formation, and undoing). Since these defenses are important in understanding the obsessive personality, they will be discussed here. Freud (1926/1936) theorized that defensive regression is basic to the understanding of the obsessive-compulsive syndrome. Regression, full or partial, to the anal-sadistic stage of psychosexual development, occurs as a defensive maneuver against the libidinal urgings of the Oedipal conflict and in reaction to associated castration anxiety. This regression accounts for the hostile, "dirty" view of sexuality and the severe superego associated with the obsessive personality. Further, the unpleasant view of sexuality serves to arouse the already harsh superego to clamor for strict, increased defense against impulse. Since regression alone is not an adequate defense, reaction-formations

coalesce.

Isolation was also considered to be a primary defense in the obsessive personality and syndrome (Schafer, 1954). Isolation was defined as either the separation of ideas from their corresponding affects or the separation of ideas that are associated emotionally. Affective connections are not available to consciousness. It thereby seemed that ". . .the idea is isolated from the threatening impulse of which it is a derivative" (Schafer, 1954, p. 336). The emotion relevant to the idea is displaced or repressed, resulting, for example, in a calm reaction when an angry response is more appropriate. In addition, ideas that may be otherwise considered forbidden may enter consciousness minus their affective charges. Isolation is exemplified by logical thinking, which strives for objectivity. The attempt to shift from the world of emotional reactions to the realm of verbal abstractions was termed "intellectualization" and is a variant of isolation (Schafer, 1954).

The role of reaction-formation in the constellation of obsessive defenses was also considered by Schafer (1954). This defense referred to conscious attitudes and behavior, which are determined by and opposite to unconscious, threatening attitudes and impulses. Reaction-formation was an indication of the strict obsessive super-ego, since the defense against forbidden strivings represents a bowing to the pressure of the superego and an effort to exonerate the self. This defense buttresses other defenses such as repression and denial, in that the forbidden impulse is not only kept out of consciousness, but is fervently fought against by the maintenance of

an opposing attitude.

The final, related defense is undoing (Schafer, 1954). While in reaction-formation an opposing attitude is maintained, in undoing ". . .something positive is done which actually or 'magically' is the opposite of something done before--in actuality or imagination" (Schafer, 1954, p. 354). An effort is made to atone for an act or thought influenced by a tabooed impulse.

Shapiro (1965) took an in-depth phenomenological approach and detailed aspects of obsessive-compulsive cognition and activity. Rigidity referred to a style of thinking manifested in inattention to new facts or different viewpoints (Shapiro, 1965). Such rigidity was noted to be typical of the obsessive style. This "special restriction of attention" (Shapiro, 1965) renders the individual unavailable to external influences. Attention in the obsessive personality is not fluid, free, and open to impressions, but rather, is marked by intense focusing and concentrating on detail. While the person gets the facts, the tone of the situation is usually missed. This is particularly apparent in social contexts. In addition, individuals with an obsessive style are unable to shift smoothly between directed and intense thinking, on the one hand, and passive and impressionistic cognition, on the other.

Shapiro (1965) also discussed the diligent effort of those with an obsessive personality. Whether their activities are productive or not, these individuals are usually constantly and intensely involved in some kind of work. This labored effort is not limited to work-related involvements, but rather, permeates all of their activities.

However, when they say they will try to do something, they do not necessarily mean that they will do it. Rather, they mean that they will tax themselves and perhaps worry about the task.

The driven quality that characterizes the activity of people with obsessive personalities may also refer to the impression that such activity is not enjoyable but is instead the result of external pressure. In actuality, the pressure is exerted by these people upon themselves. Their perception is that the pressure is forced upon them by some external, often moral, imperative. They are cut off from their desires, do not feel free, and are uncomfortable in situations in which they are free.

Finally, Shapiro (1965) noted the lack of conviction in people with obsessive personalities. There is no "sense of truth" based on direct perceptions of and responses to the world since ". . .preoccupation with technical details takes the place of recognition of and response to the actual person or event" (Shapiro, 1965, p. 50).

Other descriptions of the obsessive personality essentially reconfirm previous descriptions (Cornfield & Malen, 1975; Ingram, 1961; MacKinnon & Michels, 1971; Weintraub, 1974). As with the hysterical personality style, the bulk of the theoretical-descriptive literature on the obsessive style has focused on abnormal groups. However, there has been some limited consideration of "normal" obsessional functioning when obsessive personality style has been considered as ranging along an adaptiveness continuum (Cornfield & Malen, 1978; Salzman, 1968). Unlike the hysterical personality style, the obsessive style was formulated earlier and more clearly. Thus,

the theoretical definition has been relatively more stable over time.

Empirical Studies

A number of instruments are presently available to measure obsessive characteristics. The MMPI's scale 7, Psychasthenia, is occasionally referred to as a measure of obsessive-compulsiveness. However, it is questionable whether or not the criterion group used to develop the scale was truly appropriate. Thus, the scale may tap more general psychopathology variance than variance associated with obsessive features (Dahlstrom, Welsh, & Dahlstrom, 1972). The MMCI (Millon, 1977) offers a Conforming-Compulsive scale and the Hysteroid-Obsessoid Questionnaire (Caine & Hawkins, 1963) conceptualizes obsessive and hysterical traits as opposite ends of a continuum. As noted by Pollak (1979), other measures have also been devised (Allen & Tune, 1975; Beloff, 1957; Blum, 1949; Comrey, 1965; Cooper, 1970; Gottheil, 1965b; Grygier, 1956; Kline, 1969; Lazare et al., 1966, 1970; Sandler & Hazari, 1960). He further indicated that most, if not all, of these other scales were not standardized and lacked the sufficient reliability and validity information necessary to choose one over the other. However, Pollak did view the LKTS (Lazare et al., 1966, 1970) as one of the "more promising measures to date."

A number of factor analytic studies offer experimental evidence to support the concept of obsessive personality. (Evidence supporting the concept of anal character will also be included here since it is considered equivalent to the obsessive personality--cf. Ingram, 1961.) Intercorrelations between orderliness, parsimony, and

obstinacy have been reported (Hetherington & Brackbill, 1963; Rappaport, 1955; Sears, 1943). Significant correlations among a variety of questionnaire items regarding presumed modes of anal behavior have also been found (Gottheil, 1965a, 1965b). Early anal (Mandel, 1958; Stagner, Lawson, & Moffitt, 1955) and late anal (Stagner et al., 1955) factors have been reported. Numerous investigators have reported evidence of a single anal factor (Barnes, 1952; Beloff, 1957; Finney, 1961; Gottheil & Stone, 1968; Kline, 1968; Pichot & Perse, 1967; Sandler & Hazari, 1960; Stringer, 1970), while Brooks (1969) found two factors defining an obsessive trait and Schlesinger (1963) found 12. Other findings include Hubbard's (1967) obsessive-compulsive factor, Comrey's (1965) compulsion factor, and Lazare et al.'s (1966, 1970) obsessive factor, which has been replicated by others (Paykel & Prusoff, 1973; van den Berg & Helstone, 1975). Thus, it may be seen that strong support has accrued in favor of identifiable clusters of obsessive traits and attitudes (Fisher & Greenberg, 1977).

The features of Freud's (1908/1960) anal triad, orderliness, obstinacy, and parsimony, have been examined in relation to obsessive behavior. Overall, empirical evidence indicates that these characteristics are associated with an obsessive style. Studies concerning orderliness include that of Rosenwald (1972) who related three measures of anality to the behavior of college males when asked to straighten a messy pile of magazines. High scores on one of the measures (a questionnaire regarding anxieties about issues with indirect anal connotations) was related to spending more time

straightening the magazines. Blatt (1964) devised a composite of "optimal personality integration" based on 20 different needs (one of which was orderliness). He then had 116 research scientists rank these needs in terms of their applicability to them. Results indicated a consistent trend for the amount of deviation from the ideal of a subject's self-rank of orderliness to positively correlate with degree of anal conflict.

Rosenberg (1953) hypothesized that, because of a need for orderliness and uniformity, patients with strong obsessive tendencies would impose symmetry on ambiguous, nonsymmetrical stimuli (presented tachistoscopically). Following each exposure, subjects were required to identify the figure from a multiple-choice list, the choices varying in symmetry. Patients with obsessive features more often selected symmetrical choices than did controls, seemingly reflecting a need to impose order on perceptual experience. Adelson and Redmond (1958) believed that anal retentives (in contrast to anal expulsives) utilized more orderly, systematic methods of concentration, resulting in focused intellectual effectiveness. Their hypothesis that anal retentives would be superior in verbal recall to anal expulsives was supported. Similar findings were reported by Nahin (1953) and Marcus (1963).

Finally, other studies relating orderliness to obsessive personality have compared anality in persons whose jobs differed in degree of requisite care, precision, and compulsiveness. Segal (1961) found that accounting students were more emotionally controlled, less open in expression of hostile imagery, less tolerant

of ambiguity, and more rigid in their identifications than creative writing students. Schlesinger (1963) compared anality in accountants, chemical engineers, and educational psychologists (in descending order of presumed anal orientation). Accountants were characterized by a liking of orderliness and cleanliness (among other characteristics), consistent with their presumed greatest degree of anality. Engineers were similar to accountants and the educational psychologists unconcerned about order. Overall, empirical findings seem to support the association of orderliness with an obsessive character style.

The relationship of Freud's (1908/1960) second anal trait, obstinacy (and its associated issue of anger) to obsessive personality has also been studied. Rosenwald (1972) examined the relationship of anality measures to obstinacy (operationalized as the amount of attitude change after exposure to fictitious authoritative information), as well as to other variables. Obstnacy was related to only one anality measure (efficiency of performance in a fecal-like medium). While overall relationships were inconsistent, Fisher and Greenberg (1977) felt that the patterns found were suggestive, particularly the positive relationship between anal anxiety and obstnacy.

Other studies have also focused on obstnacy, oppositionalism, and hostility. Couch and Keniston (1960) found that individuals who tend toward non-acquiescence demonstrated characteristic anal retentive traits. Bishop (1967) found that persons with anal characters exhibited particularly strong dislike for a task under

conditions of high privation and forced compliance. A study by Rapaport (1963) demonstrated that those with anal characters preferred isolation when confronted with threatening anal stimuli. He suggested that this reaction may have been due to the projection of hostility (aroused by the study's imposed conditions) and consequent anxiety about the possibility of acting-out this hostility with others present. Noblin and associates (Noblin, 1962; Noblin, Timmons, & Kael, 1966; Timmons & Noblin, 1963) found that the anal character is negativistic when rewarded for performance, seeming to obstinately resist the researcher's attempts to influence him via praise. Finally, Tribich and Messer (1974) found that anal characters' judgments of the distance moved by an autokinetic stimulus went opposite to those suggested by a confederate. Thus, there appears to be empirical support for a link between anal character and the trait of obstinacy.

Parsimony, Freud's (1908/1960) third anal trait, has also been empirically investigated. Noblin (1962) found that psychiatric inpatients with anal characteristics were better motivated by the use of pennies in a conditioning paradigm than were those with anal characters. Rosenwald (1972) found that individuals high in anal anxiety bet less than those low in anal anxiety, thereby suggesting a more parsimonious attitude. While Rapaport (1955) found no significant relation between degree of anality and degree of preoccupation with money, differences were nevertheless in the predicted direction.

Lerner (1961) focused on the collecting and hoarding of materials (instead of money), viewed as another sublimation of a

desire to hold on to feces. Boys who were serious stamp collectors were compared to boys not interested in any type of collecting on the identification of anal and neutral words presented visually and auditorally. The collectors differed significantly in their perception of anal vs. neutral words when words were presented auditorially, but not visually. Some subjects showed unusual sensitivity, while others showed selective inattention. No perception differences were noted for noncollectors. Research supporting parsimonious attitudes towards time in the obsessive personality have also been carried out (Campos, 1966; Pettit, 1969). Thus, it seems that there is empirical support for the notion of a relationship between anal character and Freud's trait of parsimony.

Indecisiveness in the anal character has also been examined. Rosenwald, Mendelsohn, Fontana, and Portz (1966) found that increased anal anxiety (measured by difficulty in performance while hands were immersed in a fecal-like substance) was associated with increased indecisiveness. Gordon (1966, 1967) found that the greater a person's anal orientation, the more likely he was to indicate low confidence (i.e., indecisiveness) in clinical judgments and to make fewer specific patient predictions. Reed (1977) examined indecisive features of obsessional cognition. Previously, Reed (1968) had argued that difficulties in decision-making reflected an impairment in the spontaneous organization and structuring of experience. The individual then over-structured (i.e., paid close attention to details; over-specified; searched for further information; deferred completion) in a compensatory but maladaptive way. Reed's (1977) prediction that

patients with obsessive personality disorders would perform better than controls in a highly structured task requiring concentration and a deductive approach (the WAIS Arithmetic subtest), while the reverse would be true for less structured tasks requiring an inductive approach (completion of a series of 10 digits), was supported.

In summary, an ample amount of factor analytic evidence supports the scientific construct of obsessive personality. Empirical support has also accrued regarding the presence of orderliness, obstinacy, parsimony, and indecisiveness in the obsessive personality. In addition, it should be noted that there has been relatively more focus on normal groups here than in the literature regarding the hysterical style. This perhaps is due to the obsessive style's literature being better developed and the construct better defined and understood.

Family Structure Variables: Birth Order and Family Density

Overview of Birth Order

Birth order is the first developmental variable that has been selected for examination in the current study. The periodic reviews of the literature (Adams, 1972; Altus, 1966; Bayer & Folger, 1967; Bradley, 1968; Sampson, 1965; Sutton-Smith & Rosenberg, 1970; Warren, 1960; Wagner, Schubert, & Schubert, 1979) attest to this variable's continuing interest to researchers of human development. Adams (1972) referred to birth order as a "'ready-made' research variable" because of its ease of measurement and because of the intuitive feeling that it somehow exerts an influence on development. These

qualities have doubtless contributed to the variable's appeal. An overview of highlights from the birth order literature will be presented here, followed by a review of this variable's relation to hysterical and obsessive styles.

Before describing conclusions that may be drawn from birth order studies, it may be instructive to consider Kammeyer's (1967) excellent comments regarding birth order as a research variable. Kammeyer (1967) noted the absence of interpretive theoretical links between birth order and its correlates. This was seen as arising from two influences: birth order's inherent nature as a research variable and the way in which researchers seemed to "stumble upon" birth order effects while investigating other variables of more central interest.

Regarding the first influence, Kammeyer (1967) made it explicit that birth order in and of itself is not of interest. Rather, it is ". . . only an indicator of some other phenomenon" (Kammeyer, 1967, p. 72). Just what this phenomenon is, however, remains unspecified and uncertain. Kammeyer noted that birth order effects are often found to be related to some dependent variable, which the researcher then feels bound to explain via an interpretive connection. However, while such explanations are at times based on child-rearing research, more often than not they are ". . . simply based on folk culture notions of the way parents treat children in the different ordinal position" (Kammeyer, 1967, p. 72). The result is that theoretical explanations are often varied and confusing.

Concerning the second influence, Kammeyer believed that birth order effects were often accidentally discovered by researchers

primarily interested in other variables. Thus, he felt that "stumbling upon" effects explained the disparate, disconnected quality of the literature. The disconnected nature of the research was also viewed as due to investigators' lack of effort in integrating their findings with those of others. The result is that theoretical explanations of birth order effects often have a "'paste-up' quality" which seems ". . .to be responsible for the confused and disorganized nature of the theoretical interpretations and discussions. . ."

(Kammeyer, 1967, p. 75). Adams (1972) also noted the need for theoretical expansion, indicating that ". . .much remains to be done to answer the descriptive and theoretical questions: how and why?" (p. 431). This state of affairs seems to have continued into the present, as recent reviewers (Wagner et al., 1979) have not yet indicated the development of an empirically-based theory to explain birth order effects.

Wagner et al. (1979) provided a comprehensive review of intellectual, achievement, adjustment, and personality characteristics of onlyborn, firstborn, youngest, and middleborn individuals. Regarding onlyborns, Wagner et al. (1979) concluded that the studies supported and validated one another. They found that the stereotype of the only child as arrogant, selfish, spoiled, or maladjusted was an error. Rather, only children are often productive, creative, and intelligent, with special strengths in educational achievement and science and the arts. In addition, they tend to be sociable and effective leaders.

Wagner et al. (1979) concluded that the eldest child was

similar to the only child in high cognitive sophistication, intellectual ability, academic achievement, and interest in the abstract. The eldest was felt to be verbally superior because of his role as a verbal mediator between his parents and siblings (Breland, 1974; Kammeyer, 1967). While ordinal position was an important factor, Wagner et al. (1979) indicated the necessity of considering other variables, such as age spacing. Verbal ability and test intelligence were found to decrease with family size and increase with age spacing. In small families, the eldest was advantaged in terms of education. However, in large families, particularly those of a lower socioeconomic status (SES), younger children were favored. Eldest children were found to be more conforming than other ordinals in most studies.

The youngest child, relative to other ordinal positions, on the average evidenced less verbal facility and academic motivation and was at increased risk for having learning problems or being retarded (Wagner et al., 1979). However, demographic confounds (SES, sex, race, era, sibship size, and spacing to and sex of siblings) seemed to preclude strong conclusions. Youngest children also appeared to be high in sociability.

Conclusions regarding the middleborn children were the most difficult to draw (Wagner et al., 1979). Confounds were due to the fact that middleborn children came from larger sibships than other ordinal categories and the fact that, the larger the sibship, the greater the overall disadvantage in intelligence, academic achievement, parental attention, and most likely, SES. Conclusions were

also less reliable because fewer studies focused on the middleborn and because of overall poorer methodology. Middleborn children, however, did seem to garner less parental attention and to identify less with parents and adults (Purpura, 1971; Rankin & Bahnson, 1976; Singer, 1971) while looking to siblings as models (Sutton-Smith, 1968).

Conclusions from Wagner et al. (1979) and other reviews (e.g., Adams, 1972; Sampson, 1965) are tempered by Schooler's (1972) pessimistic view of the significance of birth order research. He believed that the most frequently encountered differences related to ordinal position (firstborns overrepresented in high academic or occupational positions) were more accurately interpreted as related to social class trends in family size. He noted no significant differences between firstborns and other ordinals in level of occupational achievement; no consistent, reliable relationships between ordinal position and normal personality; and no differences in terms of parental treatment. Schooler did, however, believe that other family structure variables, such as family density (Waldrop & Bell, 1964) and sex of siblings, needed to be studied in conjunction with birth order.

While the lack of empirical focus on theoretical links to describe birth order effects has been discussed (Kammeyer, 1967), various theories do exist to account for such effects. Adams (1972) divided these theories into six categories. The first dealt with intrauterine or physiological theories (Bayer, 1967). However, since such theories have infrequently directed research, Adams (1972)

focused on the remaining five theories, all dealing with aspects of socialization. The second theory dealt with the uniqueness of the only child. From this perspective, the only child is distinguished from the child with siblings because of an adult-orientation, which developed due to extended parental contact (Guilford & Worcester, 1930). Alternatively, the child is not so much adult-oriented as he is self-centered or ego-motivated (Taylor, 1945). The third theoretical position is dethronement, initially discussed by Adler (1928). In this view, the oldest child is removed from his parents' attentions by the arrival of a new sibling. He then fights to regain his lost position and importance. Authors such as Greenberg, Guerino, Lasken, Meyer, and Piskowski (1963) have attempted to explain research results from this perspective.

The fourth theoretical position has had more research focus than any other viewpoint (Adams, 1972): the anxious or relaxed parent. Roberts (1938) noted the dependence of firstborns and connected it to parental overprotectiveness and oversolicitude. While Sears (1950) also found dependence in firstborns, he related it to parents' anxiety and concern over their first child. Schachter (1959) linked Sears' and Roberts' respective notions of protection and anxiety: Since a new mother is more anxious with her first child, she is more likely to be more responsive to and solicitous of her newborn. However, the combined results of other studies (Hilton, 1967; Lasko, 1954; Thoman, Tumer, Liederman, & Barnett, 1970) have suggested that the firstborn received extensive but anxious and inconsistent attention during his early life. If later

siblings are born, he will encounter a great deal of attention reduction, which would presumably affect his own anxiety and dependence.

The last two theories discussed by Adams (1972) were actually considered partial theories, that is, they had to be combined with one of the previous viewpoints to account for birth order differences. The fifth theory concerned sibling influence. This view is best exemplified by Sutton-Smith and Rosenberg (1970), who felt that the role of sibling-sibling interactions in the development of personality had been underplayed. The final theory was that of family economics. One view held that the oldest child attends college first and is free from within-family competition for scarce funds. Alternatively, Bayer (1967) held that younger siblings had the financial advantage due to their parents' improving economic conditions and their older siblings' ability to financially contribute. However, Elder (1962) found economics to be differentially related to birth order at different SES levels. Thus, at high SES levels, the oldest receives more parental encouragement, has higher aspirations, and has an improved probability of achievement, while at lower SES levels, the youngest is more likely to benefit financially.

Overview of Sibship Spacing

The variable of family density was chosen for this study because a past reviewer (Schooler, 1972) suggested its potential significance in understanding the impact of family structure on development. This variable was defined by Waldrop and Bell (1964), in their investigation of the relation of preschoolers' dependency behavior

to family size and density, as ". . . variations in intervals between siblings, short intervals denoting high density" (p. 1187). They combined family size with density to derive an index measure of family structure. However, since family density has not developed a literature, the literature regarding a similar, related variable, sibship spacing, will be examined.

Sibship spacing has been one of the least researched family structure variables (Wagner et al., 1979). Most studies have investigated spacing effects on intelligence and achievement, while a few have considered personality variables. Conclusions have been difficult to draw due to variations among researchers concerning the temporal parameters that determine near, intermediate, and far spacing.

Wagner et al. (1979) reviewed the effect of sibship spacing on intelligence and psychosocial variables in the older child. Regarding intelligence, wider spacing is more beneficial in terms of intellectual development (Brim, 1958; Koch, 1954; Rosenberg & Sutton-Smith, 1969). Wide spacing has been associated with higher intelligence in older children in large sibships (Nuttall & Nuttall, 1975; Zajonc, 1976) and with an increased tendency to attend college and to maintain a better school record (Wagner et al., 1970). Narrow spacing seemed to exert a negative influence. Smaller gaps were related to low interest in school (Wagner et al., 1979), decreased word usage (Breland, 1972), and lower intelligence (Dandes & Dow, 1969; Nuttall & Nuttall, 1975).

The impact of short, intermediate, and wide sibling gaps on psychosocial variables in older children was also reviewed by Wagner

et al. (1979). Again, findings tended to suggest an overall negative impact on the child if age gaps were short (Lasko, 1954; Stendler, 1964). Increased dependency (Stout, 1960; Waldrop & Bell, 1966) and less resilience to emotional upset (Koch, 1954) have been noted. More neurotic children were found among those spaced less than three years from their siblings (Toman & Preiser, 1973). It has also been demonstrated that adjustment improved as spacing increased (Grinker, Grinker, & Timberlake, 1962). Older boys spaced closely have exhibited smoking and problem drinking (Zucker & Van Horn, 1972), been more passive (Koch, 1954, 1956a, 1956b) and cautious and withdrawn (Koch, 1956a, 1956b), and experienced great conflict and rivalry (Toman, 1976). While older girls with a short space between them and their sisters became tenacious and aggressive (Koch, 1956a, 1956b), they later reached their potentials in college (Cirielli, 1967). However, if the girl was displaced by a boy, she was likely to be more aggressive, ambitious, and enthusiastic and less procrastinating than other girls (Koch, 1956a).

Older children displaced after an intermediate interval (between 20-24 and 36 months) evidenced "unique problems of psychosocial stress" (Wagner et al., 1979). Such children generally experienced a loss of parental warmth and attention and an increase in friction (Lasko, 1954). Greater conflict and intersibling stress were encountered by these children (Koch, 1956a, 1956b). Boys were more quarrelsome, teasing, intense, and slower to recover from emotional upset (Koch, 1956a, 1956b). Girls were less curious and enthusiastic and attempted to gain more adult attention (Koch, 1956a, 1956b).

Less intelligence and social involvement and greater obedience, capacity for hard work, and feelings of capability have been noted (Nuttall & Nuttall, 1975).

Wide spacing, for the older child, seems to result in improved psychosocial adjustment (Wagner et al., 1979). Such children enjoyed better mother-child relations (Lasko, 1954) and were more care-free, controlled, and fervent (Nuttall & Nuttall, 1975). Widely spaced older boys were less intense, quarrelsome, and jealous, and were more enthusiastic and responsible when the younger sibling was a sister (Koch, 1956b). Boys widely spaced from a younger sister also were more fluent and flexible (Cicirelli, 1967). However, when displaced by a brother, such boys felt more apprehensive (Koch, 1956b). Widely spaced older girls with younger sisters dawdled less, were less quarrelsome, and more sociable than older girls spaced closely to sisters (Koch, 1956a, 1956b). They have also been found to have more school friends (Nuttall & Nuttall, 1975). However, when the older girl had a closely spaced younger brother, she was seen as nervous (Koch, 1956a, 1956b).

The effects of sibling-spacing on younger children were also reviewed by Wagner et al. (1979). Spacing effects on the younger child appeared to be more closely related to the sex of the subject as well as the sex of the other child. Overall, effects seemed to be less negative than those for the older sibling. Regarding the intelligence of closely-spaced younger children, such children were found to be more creative and to exhibit increased reading and arithmetic abilities (Cicirelli, 1967). A younger child with a close

brother averaged higher on math than when preceded by a sister (Koch, 1954, 1955). This effect has been found for boys alone (Lunneborg, 1971). A close older sister improved cognitive ability for younger girls (Rosenberg & Sutton-Smith, 1969).

The effects of intermediate and wide spacing on intelligence in the younger child were also reviewed (Wagner et al., 1979). Regarding intermediate spacing, the younger of two such siblings has been found to be more intelligent than a child with a close older sibling (Koch, 1956b). However, Nuttall and Nuttall (1975) reported that, while the younger sibling is the more intelligent of the two, such intermediately-spaced children are less intelligent than younger children who are spaced closely or widely. Wide spacing has resulted in extremes in the younger child's reading ability (Levinson, 1963) and has been related to higher academic aspiration when the sibling is the eldest and is achievement-oriented.

The impact of spacing on psychosocial traits of the younger child were also reviewed by Wagner et al. (1979). Closely-spaced (vs. intermediately-spaced) siblings have been found to exhibit more originality, tenacity, and playfulness (Wagner et al., 1979). The younger children from close sibling pairs have been found to be more disadvantaged than elders (Chittendon, Foan, Zweil, & Smith, 1968). Boys with a close older sister have been found to increase feminine activities and to assign more power to girls (Bigner, 1971a, 1971b). Intermediate spacing has been linked to less vocalizing (Judd & Lewis, 1976; Lasko, 1954) and greater intersibling stress (Koch, 1956b).

In general, wide spacing has been related to positive effects

on security, poise, gender identity, and happiness in the younger child (Wagner et al., 1979). There is less competition (Rosenberg & Sutton-Smith, 1969) and wider spacing seems to result in a younger child who is happier, care-free, controlled (Nuttall & Nuttall, 1975), sociable, and enterprising (Koch, 1956b). Boys separated from their older sisters by a wide interval were more masculine than those closely spaced (Bigner, 1971b). However, very wide spacing appears to exercise an inhibiting influence on younger children. Researchers have reported lower creativity (Datta, 1968), less self-sufficiency (Nuttall & Nuttall, 1975), and very poor reading skills (Levinson, 1963). Very widely spaced lastborns (i.e., over five years) were more similar to eldests than any other youngests on anxiety, stress, and fear reactions (Collard, 1968; Helmreich, Kurkir, & Collins, 1968; Miller & Zimbardo, 1966).

Hysterical and Obsessive Personalities: Birth Order and

Family Density

The hysterical personality's ordinal position has been noted in both the theoretical/clinical literature and the empirical literature. Regarding the former, Zetzel (1968) described many of her "true hysterics" as having been the oldest. This was reiterated by Tupin (1974) in his compilation of hysterical personality characteristics. In contrast, MacKinnon and Michels (1971) felt that the patient with an hysterical personality style had occupied a ". . .special position in the family, such as being the youngest child" (p. 125).

From the empirical literature, Stephens and Kamp (1962) (in

their study of hysteria as a clinical syndrome, not as a personality style) found that 30 of their 100 patients were either the youngest (23) or only (seven) children. Blinder's (1966) uncontrolled study of characteristics of the hysterical personality in a psychiatric sample found that 11 of 21 patients were the youngest in their families. However, results such as these are difficult to interpret without population base rates. Slavney and McHugh (1974) found no differences between patients diagnosed hysterical personality and control patients on only, oldest, or youngest child status. Ruff, Ayers, and Templer's (1975) hypothesis that youngest children would have more hysterical traits was not borne out in samples of psychiatric patients and normals. It thus appears that birth order's relation to hysterical personality remains speculative. Limitations of the literature include a focus on abnormal groups, a lack of clear differentiation between hysterical personality and hysteria, a lack of population base rates, and an overall lack of theorizing or research in this area.

Even less mention is made of birth order in relation to obsessive personality. Birth order is not discussed in the theoretical literature. However, two empirical studies are relevant. Kayton and Borge (1967) examined birth order in obsessive-compulsive personality disorders and found that this disorder occurred predominantly in males who were either first-born or only children. Ruff et al. (1975) also investigated the hypothesis that only and firstborn children would tend to have more obsessive personality tendencies. However, this was not borne out in either psychiatric or normal

college samples. Thus, the relationship between birth order and obsessive personality also remains in the realm of speculation. Limitations of the literature include, again, a focus on abnormal groups and an overall lack of theory and research.

There has been no previous work relating family density to hysterical or obsessive personality styles. Therefore, family density will be examined in the current study.

Parenting Styles

Overview of Parenting Dimensions

Parenting styles comprise the third developmental variable to be examined in relation to hysterical and obsessive styles in the present study. It was chosen because of parents' undeniable influence on their children's development. Studies of parenting styles have focused either on relating observer-rated parental behaviors and attitudes to children's behavior or on examining children's reports of parents' behaviors (Goldin, 1969). Based on these latter reports, researchers have used factor analysis to derive dimensions of parenting behavior. Such a dimensional approach avoids the problems inherent in relating, in a cause-and-effect manner, specific parental behaviors to children's behaviors (Craig, 1979). In the current study, Siegelman's (1965; Roe & Siegelman, 1963; Siegelman & Roe, 1979) dimensions of parenting behavior will be examined: Loving-Rejecting, Casual-Demanding, and Attention (a unipolar factor). These dimensions have been utilized previously in studies of cognitive abilities (Abelew, 1974; Coleman, 1978), self-esteem (Foster, 1974; Halechko, 1977),

femininity development (Wagner, 1974), experienced control (Gootnick, 1976), fear of success (Reinhard, 1978), vocational choice (Wittmer, Jeffers, & Persons, 1974), obesity (Champion, 1978), delinquency (Frederick, cited in Siegelman & Roe, 1979), and addiction problems (Goldstein, 1976; Serednesky, 1973; Tiboni, 1976).

There has been consistency in the dimensions of parenting reported. Besides Siegelman's work, the other major research has been conducted by Schaefer (1965a, 1965b). Schaefer (1965b) labeled three factors: Acceptance vs. Rejection, Psychological Autonomy vs. Psychological Control, and Firm Control vs. Lax Control. Subsequent factor analyses yielded the same factor structure (Armentrout & Burger, 1972; Burger & Armentrout, 1971; Cross, 1969; Renson, Schaefer, & Levy, 1968). However, Schaefer's model is based on the concept of a sphere formed by the intersect of his three factorial dimensions. Therefore, while Schaefer and Siegelman both account for the same reported behaviors, they do so in two different manners. With Schaefer's model it is necessary to invoke intersecting planes to fit data from previous studies, whereas Siegelman's three factors more easily and parsimoniously explain previous research (Goldin, 1969). It is because of its parsimony that Goldin (1969) felt that Siegelman's model could be recommended over Schaefer's. Hence, Siegelman's model is used in the current study.

Siegelman (1965; Roe & Siegelman, 1963) factor-analytically derived three orthogonal dimensions of parent behaviors based on children's reports. Roe and Siegelman (1963) developed the Parent-Child Relations Questionnaire (PCR), making certain to include items

which referred to specific parental behaviors, not attitudes, in an effort to reduce distortions from the use of retrospective data. Items for both mother and father were included. Factorial structures for the three groups studied were similar and the three initial factors were designated Loving-Rejecting, Casual-Demanding, and Overt Concern (again, a unipolar factor). Siegelman's (1965) factor analysis of the Bronfenbrenner Parental Questionnaire yielded similar dimensions.

Siegelman and Roe (1979) presented a revised version of the PCR, the PCR II. The instrument is designed as a retrospective method of measuring perceived parental behaviors. The original questionnaire was reworked because analyses of responses indicated that parents behaved differently with sons and daughters and that there were also differences between same-sex and cross-sex behaviors. Thus, the new format has separate questionnaires for son-mother, son-father, daughter-mother, and daughter-father. The new form is also shorter and more factor pure (i.e., those items with the highest factor loadings were included in the appropriate PCR II category).

Hysterical and Obsessive Personalities: Parenting Styles

Traditional psychoanalytic theory of hysteria, the clinical syndrome, has emphasized the Oedipal period as central in the disorder's etiology (Fenichel, 1945). Krohn (1978) indicated that fantasies regarding incestuous involvement with the opposite-sexed parent resulted in feelings of fear and guilt, as well as the possibility of losing love from important primary objects. Hysteria was

therefore a maladaptive method of compromising incestuous impulses and internalized taboos (Krohn, 1978). Regarding the hysterical personality style, Reich (1933/1969) also believed in the primacy of the Oedipal period and a genital-level fixation.

Subsequent writers (Blacker & Tupin, 1977; Easser & Lesser, 1965; Halleck, 1967; Hollender, 1971; MacKinnon & Michels, 1971) have elaborated the parent-child dynamics that seem to be of significance in the development of an hysterical character style. The core dynamic seems to be one of maternal affectional deprivation (Blacker & Tupin, 1977; Halleck, 1967; MacKinnon & Michels, 1971) followed by a turning to the father for the gratification of unmet nurturant needs (Blacker & Tupin, 1977; Halleck, 1967; Hollender, 1971; MacKinnon & Michels, 1971). Mothers have been depicted as cold, detached, and not nurturing (Blacker & Tupin, 1977; Halleck, 1967; MacKinnon & Michels, 1971), as well as domestic, consistent, responsible, and romantically frustrated (Easser & Lesser, 1965). Fathers have often been seen as seductive (Easser & Lesser, 1965; MacKinnon & Michels, 1971). Efforts to obtain substitute maternal affection from the father were typically based on coy, flirtatious, seductive behavior (Blacker & Tupin, 1977; Halleck, 1967). However, as puberty neared, the father's seductiveness would shift, due to threatening incestuous feelings (Blacker & Tupin, 1977; Easser & Lesser, 1965; MacKinnon & Michels, 1971). Consequently, as more mature sexual feelings developed, they needed to be repressed. Thus, the seductive behaviors persisted while the threatening thoughts and feelings were split off and repressed.

From an alternative perspective, offered by a prominent current

theorist, Millon and Millon (1974) couched their theoretical view of hysterical personality development in social-learning terms. They proposed that the active-dependent (their term for hysterical) child seems to learn that it is necessary to engage in certain sanctioned behaviors and satisfy parental desires in order to gain attention and affection. Strategies for achieving these ends were shaped by three conditions: minimal negative reinforcement; positive reinforcement contingent upon performance of parentally-sanctioned behaviors; and inconsistent positive reinforcement (Millon & Millon, 1974). The results of this pattern of experiences are: the development of strategies to evoke rewards; a feeling of competence and acceptance only when one's performances are noted by others; and a habit of seeking approval for approval's sake. In addition, Millon and Millon addressed the significance of modeling. An histrionic parent was seen as facilitating an histrionic personality pattern, since he or she would provide a vivid, clearly defined model for vicarious and imitative learning.

Empirical studies have emphasized characteristics of home life and parents, rather than parental behaviors. Stephens and Kamp (1962) found that 52% of their sample of hysterical (clinical syndrome) patients appeared to have experienced childhood affectional deprivation. Slavney and McHugh (1976) indicated that patients diagnosed as hysterical personality disorders, in comparison to control patients, were more likely to have described their early home life as unhappy. Mothers have been described as cold, quarrelsome, un-giving, and remote (Blinder, 1966), as well as dominant (Luisada,

Peele, & Pittard, 1974). Fathers have been described as unassertive or absent during childhood (Luisada et al., 1974). A high degree of paternal alcoholism has also been noted (Blinder, 1966; Lazare & Klerman, 1968; Luisada et al., 1974; Slavney & McHugh, 1974). Descriptions of fathers seemed to be more positive overall than those of mothers (Blinder, 1966).

The traditional psychoanalytic theoretical formulation of the obsessive personality centered on fixations at the anal stage of development. Early in the development of the concept, anal character was linked to the conflicts around the excretory function and toilet-training (Abraham, 1921/1953; Freud, 1908/1960; Jones, 1918/1961). As noted by Pollak (1979), the way in which training is carried out determined whether or not anal fixations occurred. Thus, training may be too early, too late, too strict, or too gratifying. Abraham (1921/1953) commented on the necessity of the child's "psychical preparedness," which

. . . only appears when the child begins to transfer on to objects (its mother, etc.) the feelings which are originally bound narcissistically. Once the child has acquired this capacity it will become clearly 'for the sake of' this person (p. 374).

Millon and Millon (1974), as with the hysterical personality, viewed the development of the obsessive style from a social-learning perspective. The central feature of early training was parental overcontrol by contingent punishment. Overcontrolling parents, while seen as caring, were also firm and repressive. They showed their concern by preventing the child from creating trouble for himself as well as for them. Thus, while both parents were typically

punitive in response to transgressions, punishment was doled out only if the child misbehaved. The child learned to avoid punishment by conforming to parental demands and his behavior was shaped by fear and intimidation. He also learned via imitation to model himself on his parents (Millon & Millon, 1974). The subjective feeling the child developed, that of feeling pride in being good, allowed him to master his fear of parental rejection and to gain the parents' approval. Unfortunately, such learning experiences also likely result in behavioral rigidity, due to a lack of alternatives for action. The person with an obsessive personality had also been exposed to conditions which taught him to be responsible and to feel guilty, even when he is not.

Empirical research on etiological elements of the obsessive personality has focused on the relationship between toilet-training and the development of obsessive traits (Beloff, 1957; Bernstein, 1955; Durrett, 1959; Finney, 1963; Hetherington & Brackbill, 1963; Holway, 1949; Huschka, 1942; Kline, 1969; Miller & Swanson, 1966; Sears, Rau, & Alpert, 1965; Sewell, Mussen, & Harris, 1955; Straus, 1957; Whiting & Child, 1953). A review of these studies revealed ". . . little, if any, empirical evidence for the classical psychoanalytic position on the etiology of the obsessive-compulsive or anal character type. . ." (Pollak, 1979, p. 228). However, other findings, more relevant here, indicated positive relationships between anal characteristics in the child and in the parents (Beloff, 1957; Hetherington & Brackbill, 1963). Since these findings, others (Carr, 1974; Finey, 1963) have expanded the notion of toilet-training as a

determinant of obsessive style to a wider focus, namely, a general pattern of rigidity in child-rearing. In his review of the obsessive personality, Pollak (1979) concluded in this regard:

It may be, then, that toilet-training practices are not caused in any strict sense, but are a correlate of a larger and more influential child-rearing pattern. In this view, obsessive-compulsive style is seen as largely socially learned behavior that results from the imitation and modeling of significant others over a number of years throughout the childhood period (pp. 228-229).

In summary, the psychoanalytic perspective on hysterical personality views the style as a result of maternal affectional deprivation, turning to the father for nurturance, and subsequent repression of sexual affect and splitting of affect and cognition. A social-learning approach would view a pattern of histrionic behavior as a result of specific reinforcement contingencies and modeling. Based on empirical work, the following characteristics seem to have characterized the home life of a person with an hysterical style: affectional deprivation; paternal alcoholism; and parents being inadequate in some way. However, such conclusions are very limited, due to a focus on abnormal groups, the overall lack of research on parental behavior, and the often poor methodology employed in the studies.

The psychoanalytic theory of obsessive personality views this style as resulting from fixations in the anal phase of psycho-sexual development. These fixations developed due to conflicts around toilet-training. Alternatively, a social-learning perspective would view the style as a result of particular reinforcement contingencies and modeling. Empirical studies of parenting have focused on toilet-training practices and have not supported the classical psychoanalytic

position. However, a potentially promising lead is the notion of general parental rigidity in child-rearing.

Temperament

Overview of the Constitutional Variable of Temperament

The final development variable to be assessed in relation to hysterical and obsessive styles is that of temperament. This variable was chosen for examination because of its very likely significant impact on personality development. In the current study, the nine temperament categories developed by Thomas, Chess, and Birch (1968) (probably the best-known research on temperament) will be measured by the revised Infant Temperament Questionnaire (Carey & McDevitt, 1977). This instrument was designed specifically to measure the Thomas et al. (1968) categories.

Notions of temperament as it relates to personality have been extant for centuries. Best known among these is the humoral theory of personality, which held that personality traits were associated with excess bile, blood, and phlegm. A serviceable and generally accepted definition of temperament was offered by Allport (1961):

Temperament refers to the characteristic phenomena of an individual's nature, including his susceptibility to emotional stimulation, his customary strength and speed of response, the quality of his prevailing mood, and all the peculiarities of fluctuation and intensity of mood, these being phenomena regarded as dependent on constitutional make-up and therefore largely hereditary in origin (p. 34).

Buss and Plomin (1975) felt that, although it was clear that Allport rightly included a hereditary component to his definition, it was nevertheless necessary to explicate two other aspects of his

conceptualization. Thus, they noted that temperament is more concerned with style (i.e., how a response is made) than with content (i.e., what the response is), and that it is manifested in broad dispositions (which are presumed to differentiate during the course of development) rather than in specific behaviors or traits.

Previous temperament theories have included the work of Sheldon (1942) and Diamond (1957). A more recently developed view of temperament has been proposed by Buss and Plomin (1975; Buss, Plomin, & Willerman, 1973; Plomin, 1974). Buss et al. (1973) selected four temperaments that they believed met Allport's definition: Emotionality (arousal level; corresponds to intensity of reaction); Activity (amount of response output); Sociability (tendency to approach others); and Impulsivity (quickness of response).

These temperaments were evaluated by Buss and Plomin (1975) on five criteria to qualify as temperaments. Two of the criteria were viewed as "logical" (adaptive value; and presence in animal forebears, i.e., evidence of an evolutionary history) and the other three as "empirical" (evidence of inheritance; stability during childhood; and retention into adulthood). Buss and Plomin's (1975) review of research relevant to each of these criteria led them to conclude that Sociability stood on "firm ground" as a temperament. They believed that a good case could be made for Activity as a temperament and a "fair" case for Emotionality. Buss and Plomin (1975), however, concluded that a definitive case had not yet been made for the inclusion of Impulsivity as a temperament.

The inheritance of these temperaments was examined by Buss et

al. (1973). Mothers of 127 pairs of same-sexed twins rated the twins on the four temperaments, using the EASI (an acronym for the four temperaments) Temperament Survey. Zygosity was determined by a modified version of Nichols and Bilbro's (1966) questionnaire assessing physical characteristics. The EASI was factor analyzed and four factors were found for boys and for girls. However, whereas for boys the Impulsivity factor was the purest, for the girls Impulsivity items also loaded on the Emotionality factor (Buss et al., 1973). On all four of the factors for boys, monozygotic (MZ) twins had significantly higher correlations than dizygotic (DZ) twins. Female MZ twins' scores correlated significantly higher than DZ girls on all factors but Impulsivity, on which they were nearly equivalent. Buss et al. (1973) thus speculated that Impulsivity may need to be evaluated differently in girls.

Heritability estimates indicated that heritability for Activity, Sociability, and Impulsivity was somewhat higher in boys than in girls, consistent with previous reports of higher heritability in boys (Nichols, 1966). The heritability estimates for Emotionality, however, were similar for boys and girls. An examination of age trends indicated that all correlations increased with age for Emotionality. This suggested to Buss et al. (1973) that environmental factors were operating to make the twins more similar. Correlations for the other three temperaments tended to decrease with age, suggesting to the researchers that environmental factors were operating in a divergent manner. Buss et al. (1973) urged caution in interpreting these age trends, due to the small Ns, but did find the

results suggestive for future research.

Buss et al. (1973) concluded that while the results supported a genetic component to the four temperaments, the findings also indicated the influence of environmental factors. Their belief in a genetic component was based on the higher correlations for MZ twins than for DZ twins. However, if differences between correlations are too small or too large, environmental influences are inferred. It is relatively clear to see that, if the difference between MZ and DZ correlations is small, environmental effects may be assumed. However, it is also possible for differences to be too great to be accounted for by genetics (Loehlin, 1969) and environmental influences are then inferred which operate to make the twins more alike, less alike, or both. The age trends also buttress the conclusion that temperaments are inherited but also affected by socialization (Buss et al., 1973). The researchers also noted that personality attributes may show a different inheritance or may be organized differently in boys and girls.

As stated previously, perhaps the best-known work in the area of temperament is that of Thomas, Chess, and Birch (1968, 1970; Thomas & Chess, 1977). Consistent with Allport's (1961) implicit differentiation between style and content of a response, Thomas et al. (1968) focused on temperament as

. . .the behavioral style of the individual child--the how rather than the what (abilities and content) or why (motivation) of behavior. Temperament is a phenomenologic term used to describe the characteristic tempo, rhythmicity, adaptability, energy expenditure, mood, and focus of attention of a child, independently of the content of the specific behavior (p. 4).

Temperament was not viewed as "immutable," but rather, as subject to environmental influences during the course of development, as are variables such as height, weight, intelligence, etc. (Thomas et al., 1968).

The primary sample source for the study was derived from participants in the New York Longitudinal Study (NYLS) (Thomas, Chess, Birch, Hertzig, & Korn, 1963; Thomas et al., 1968). Sample collection was conducted from 1956 to 1962 and 85 middle or upper-middle class families (a total of 141 children) were involved. Nine temperament categories were derived based on an inductive content analysis of parent interview protocols for the first 22 children studied. A three point scale was established for each category. The nine categories and their definitions were as follows:

- 1) Activity Level: the motor component present in a given child's functioning and the diurnal proportion of active and inactive periods. . .
- 2) Rhythmicity (Regularity): the predictability and/or unpredictability in time of any function. . .
- 3) Approach or Withdrawal: the nature of the initial response to a new stimulus. . . Approach responses are positive. . . Withdrawal responses are negative. . .
- 4) Adaptability: response to new or altered situations. . .
- 5) Threshold of Responsiveness: the intensity level of stimulation that is necessary to evoke a discernible response, irrespective of the specific form that the response may take, or the sensory modality affected. . .
- 6) Intensity of Reaction: the energy level of response, irrespective of its quality or direction.
- 7) Quality of Mood: the amount of pleasant, joyful and friendly behavior, as contrasted with unpleasant, crying, and unfriendly behavior.

8) Distractibility: the effectiveness of extraneous environmental stimuli in interfering with or in altering the direction of the ongoing behavior.

9) Attention Span and Persistence: two categories which are related. Attention span concerns the length of time a particular activity is pursued by the child. Persistence refers to the continuation of an activity in the face of obstacles to the maintenance on the activity direction (Thomas & Chess, 1977, pp. 21-22).

Ratings were based on interviews with parents during the children's infancy. As the child grew older, however, other sources of behavioral data were utilized: teacher interviews; school observations; psychometric testing at ages three, six, and nine; and separate interviews with each child and parent at ages 16 and 17. Data was always described in factual terms, directed not merely at what the child did, but the way in which he did it.

Based on experiences with the different children in the sample, combinations of temperaments were arranged into constellations to describe three particular types of children (Thomas et al., 1968). The Easy Child was characterized by regularity, positive approach responses to new stimuli, high adaptability to change, and mild or moderately intense mood which is, in the main, positive. In contrast, the Difficult Child was marked by responses to new stimuli, lack of slow adaptability to change, and intense, often negative, expression of mood. The Slow-to-Warm-Up Child exhibited mild negative responses to new stimuli, with a slow adaption following repeated contact, reactions mild in intensity (whether positive or negative), and less tendency to exhibit irregularity.

A factor analysis of the NYLS ratings of the nine temperament

categories for the first five years of life derived three factors (Thomas et al., 1968). One factor, Factor A, met the criteria for relative consistency over the five-year span and was comprised of approach/withdrawal, adaptability, mood, and intensity. This factor therefore lent empirical support to the Difficult/Easy Child distinction, since it differed from those two categories only in that regularity was excluded.

Thomas and Chess (1977) presented quantitative evidence of the temporal consistency of the nine temperament categories. NYLS quantitative scores for the nine temperament categories were used to calculate inter-year correlations (i.e., correlations between ages 1-2, 1-3, 1-4, 1-5, 2-3, 2-4, 2-5, 3-4, 3-5, and 4-5). Each child's scores were pooled for each year and product-moment correlations computed based on the pooled weighted scores. Results revealed significant correlations from one year to the next for all categories except Approach/Withdrawal, Distractibility, and Persistence. Thomas and Chess (1977) noted that these three categories had skewed distribution curves and suggested that their low level of inter-year correlations may have been due to insufficient differentiation of subjects' quantitative scores.

In addition, Thomas and Chess (1977) found that the number of significant correlations decreased as the time span for comparison increased. Activity Level and Adaptability exhibited the greatest number of inter-year correlations. The decreasing number of significant correlations over time was viewed as reflecting either methodological complications, change in the expression of temperament, or

both (Thomas & Chess, 1977).

Continuity of temperamental characteristics from infancy to early childhood was also assessed by McDevitt (1976). Carey's (1970) Infant Temperament Questionnaire, a measure of Thomas et al.'s (1968) nine temperament categories, was administered to mothers when their children were between four and eight months of age. The Behavioral Style Questionnaire (McDevitt & Carey, 1978), which was designed to assess the same nine categories from the ages of three to seven, was administered when the children were within that age range. McDevitt (1976) found that Activity Level, Adaptability, Threshold, and Intensity were stable for both boys and girls up to five years. Rhythmicity was also stable for girls and Mood for boys. Activity Level and Mood were stable only for boys ages five to seven. Easy, Difficult, and Slow-Warm-Up types were computed for each age interval by cluster analysis, with a significant degree of consistency of cluster categorization from infancy to five to seven years. McDevitt (1976) believed that temperaments influenced personality throughout development and that periods of instability reflected concurrent developmental changes in behavioral competence or significant shifts in the social environment.

The issue of whether or not Thomas et al.'s (1968) temperament categories have a genetic basis has been addressed by Torgersen (1973) and by Rutter, Korn, and Birch (1963). Torgersen (1973) compared 53 sets of twins (34 MZ sets, 16 DZ sets, and three of uncertain zygosity), utilizing the NYLS interview protocol for rating temperament via home interviews with mothers when the twins were two and nine

months of age. Results indicated that at two months, there were statistically significant differences between MZ twins and DZ twins in Regularity and Threshold. At nine months, all differences were significant. In all of the temperament categories, as at two months of age, the MZ twins were more similar to each other than were the DZ twins. Torgersen's (1973) comparison of results at the two time periods revealed that the MZ twins had a weak tendency toward diminished intrapair differences between the two ages and the DZ twins had a greater tendency toward increased differences in all categories. Torgersen (1973) concluded that there was a strong genetic influence on temperament. Rutter et al.'s (1963) smaller-scale study found the strongest evidence for a genetic component to lie in Activity Level, Approach/Withdrawal, and Adaptability, as well as, though to a lesser degree, Threshold, Intensity, and Mood. Results of these two studies led Thomas and Chess (1977) to conclude that a strong genetic basis existed for temperament.

Hysterical and Obsessive Personalities: Temperament

No work has been done relating temperament variables to hysterical and obsessive styles of personality. Therefore, such relationships will be examined in the current study. However, limited research attention has focused on the degree of constitutional basis of hysterical and obsessive personalities. Thus, Young, Fenton, and Lader (1971) offered evidence of possible genetic factors associated with hysterical personality traits. And Hays (1972) concluded that genetics, gender, and environment interacted to form obsessive

personalities.

Hypotheses

Two contrasting personality styles, the hysterical and the obsessive, have been presented. Theoretical work describing these styles has tended to focus on their manifestations within abnormal groups. Little empirical research has been focused on the delineation of the hysterical style and such research is limited by an emphasis on abnormal groups. In contrast, there has been more empirical work on defining the obsessive personality as a scientific construct and the research has not been as limited to abnormal groups.

The literature, focused on developmental variables (birth order, family density, parenting styles, and temperament) potentially associated with these personality styles, is, overall, sparse and not addressed to normal personality. The theoretical and research birth order literature on hysterical personality is limited. Birth order has not been discussed theoretically in the development of the obsessive personality, while it has received very limited attention empirically. No work has been done, either theoretically or empirically, on the relationship of these styles to family density or temperament. Theoretical work on parenting styles and the development of hysterical personality is better developed relative to the other developmental variables. However, very little empirical work has been done. What is available has not really focused on relevant, informative parental variables. The theoretical literature regarding the obsessive personality and parenting styles is, also, relatively

well-developed. The empirical literature concerning their relationship is also well-developed but specifically focused on the role of toilet-training practices in the development of the obsessive style. A need to take a wider focus, on general parental rigidity, has been noted in the literature review.

With the exception of the empirical work on the obsessive personality and parenting styles, an over-arching criticism of the above developmental, theoretical, and empirical findings is that virtually all of them are based on abnormal groups. This limits results, since it is questionable to extrapolate from abnormal development to normal development. A related problem concerns assignment to groups. Since much work used abnormal samples, group classification was typically based on subjective diagnoses rather than a priori empirical criteria. Finally, lack of control groups in some studies limits the usefulness of their findings.

The current study will attempt to rectify these methodological shortcomings and fill a gap in the literature regarding developmental variables associated with normal hysterical and normal obsessive personality styles. Hence, normal groups of persons with hysterical and obsessive styles will be studied, a priori classification criteria will determine group membership, and a control group of individuals with blended personality features will be utilized. The three groups will be assessed on the developmental variables of birth order, family density, parenting styles, and temperament. An attempt will then be made to determine the combination of developmental variables best associated with each style. In addition, the developmental dependent

variables will also be examined individually in relation to the hysterical and obsessive styles. Hypotheses regarding the relationship of these individual variables to hysterical and obsessive styles are as follows:

1) Birth Order and Family Density

As noted in the literature review, only children have been found to be intelligent, productive, educationally accomplished, effective leaders, creative, and social. They were noted to be similar to eldest children in high cognitive sophistication, intellectual ability, academic achievement, and interest in the abstract. In addition, eldest children have been found to be more conforming than other ordinal positions and to be verbally superior. These descriptions are very consistent with an obsessive style of personality in terms of an intellectual orientation, productivity, academic achievement, and a conformist nature.

In contrast, youngest children have evidenced less verbal facility, less motivation to excel academically, and high sociability. Such a description is consistent with an hysterical personality style, since persons with hysterical styles are typically socially ascendant and disinclined toward intellectual pursuits.

Based on the similarities between eldest/only children and obsessive style and youngest children and hysterical style, it is hypothesized that persons with obsessive styles are more likely to be eldest or only children than persons with either an hysterical or a blended character style. In addition, it is also hypothesized that individuals with an hysterical style are more likely to be youngest

children than persons with either an obsessive or a blended character style.

Since there is no literature developed on family density and its relationship to hysterical and obsessive personalities, no specific hypotheses are made regarding such a relationship.

2) Parenting Styles

As noted previously, three dimensions of parenting, derived from children's reports of parents' behavior, are Loving-Rejecting, Casual-Demanding, and Attention (Siegelman & Roe, 1979). These dimensions of parenting will be useful in examining retrospective reports of perceived parents' behavior from persons with hysterical and obsessive styles.

It is difficult to draw conclusions regarding a normal population of hysterical personalities from the parenting style literature because so much of the work, both theoretical and empirical, is based on abnormal groups. The overall negative correlates (e.g., cold mothers; maternal affectional deprivation; paternal alcoholism; seductive fathers) could very likely to correlates of an abnormal population, not hysterical personality per se. Hence, it is difficult to use the literature as a guide in developing hypotheses concerning relationships between perceived parenting styles and normal hysterical personality. However, based on features of the hysterical style, it is possible to make educated guesses, as it were, regarding the type of parenting received as a child. The hysterical personality has been described as emotionally effusive; not concerned with detail, mundane activities or intellectual pursuits; and socially

ascendant and attention-seeking. Therefore, one may reasonably hypothesize that persons with hysterical personalities would be more likely to report high scores (i.e., more Loving, Casual, and greater Attention) on the parenting dimensions than persons with either obsessive or blended personality styles.

Although the theoretical literature on the obsessive personality style is based on clinical groups, there is a common theme that runs through both that portion of the literature and the empirical literature (which has included a focus on normals), namely, the theme of control. As noted previously, empirical evidence does not support the relationship of toilet-training practices to the development of an obsessive personality. However, a potentially promising research lead is the notion of general parental rigidity in child-rearing practices. In addition, prominent features of the obsessive style include lack of emotional expressiveness; an intellectual, task-oriented approach; and introversion. Therefore, one may plausibly hypothesize that individuals with obsessive styles would be more likely to report lower scores (i.e., more Rejecting, Demanding, and less Attention) on the parenting dimensions than persons with either hysterical or blended personality styles.

3) Temperament

As discussed earlier, the nine temperament categories of Thomas et al. (1968) will be focused upon this study in an effort to examine the relationship between temperament and hysterical and obsessive personality styles. However, since there is no literature investigating temperament and these styles, there are no guides to readily

suggest hypotheses. Nonetheless, descriptions of hysterical and obsessive styles may be used to logically develop hypotheses regarding the temperament categories.

Given the dynamic quality of the hysterical personality, versus the cool, phlegmatic quality of the obsessive personality, one might reasonably hypothesize that persons with hysterical personalities would have higher Activity scores than persons with either obsessive or blended personalities. The opposite hypothesis is made for obsessive personalities; that is, that their scores would be lower than those for the other two groups. The volatility of the hysterical personality leads to the hypothesis of lower Rhythmicity scores for that style in contrast to the other two styles. The obsessive personality's predictability results in the hypothesis of higher Rhythmicity scores in comparison to the other two groups. The sociability that is characteristic of the hysterical personality suggests the hypothesis of scores in the Approaching direction in comparison to the other two groups, while the obsessive personality's introversion results in the hypothesis of scores in the Withdrawal direction in comparison to the other two groups. The hysterical personality is also characterized by an easy-going nature, which would likely result in higher Adaptability than the other two groups. In contrast, the obsessive personality's rigidity leads to the hypothesis of less Adaptability than the other groups.

The reliance on repression suggests a higher Sensory Threshold for hysterical personality. The emotionality often seen in hysterical personality may be evident in higher Intensity of Reaction scores,

while the obsessive personality's phlegmatic nature would be seen in milder Intensity of Reaction scores. The hysterical personality's bright affect would likely be reflected in scores indicating a more positive Mood than the other two groups, while the opposite may be true for the obsessive style, due to a more subdued, pessimistic affect. Finally, it may reasonably be hypothesized that persons with an hysterical style would have greater Distractibility and less Persistence than the other two groups, since the style is relatively more breezy, scattered, and easily bored. In contrast, the obsessive personality group would probably evidence less Distractibility and greater Persistence than the other two groups, since that style is noted for the ability to concentrate and single-mindedness. Thus, hypotheses have been made for each temperament category for both styles, with the exception of Sensory Threshold, where a hypothesis was made for the hysterical style only.

CHAPTER III

METHOD

Subjects

The subjects for this study were 64 undergraduates (27 males, 37 females) who were recruited from introductory and advanced classes in psychology during the Spring and Summer semesters, 1982. All Spring semester, and most Summer semester, students received extra course credit for their participation in the project.

Materials

Several questionnaires were administered in the course of the study. Appendix B lists six of the seven measures and the meanings of score directionality. Instruments employed for defining criterion groups were the Lazare-Klerman Trait Scales (Hysterical and Obsessive scales (Lazare et al., 1966, 1970), the Millon Multiaxial Clinical Inventory (Gregarious-Histrionic and Conforming-Compulsive scales) (Millon, 1977), and the Myers-Briggs Type Indicator (Myers, 1962). The State-Trait Anxiety Inventory (Trait Anxiety Scale) (Spielberger, Gorsuch, & Lushene, 1970) was employed as a "screen" against psychopathology. Dependent measures included Waldrop and Bell's (1964) Family Density Index, Carey and McDevitt's (1977) Revised Infant Temperament Questionnaire, and Siegelman and Roe's (1979) Parent-Child Relations Questionnaire II. The psychometric properties of the

instruments are as follows:

1) Lazare-Klerman Trait Scales

The Lazare-Klerman Trait Scales (LKTS) were discussed previously in the literature review. They were selected for use in assigning subjects to personality style groupings because of their promise as measures of hysterical and obsessive styles (Pollak, 1979, 1981).

Lazare et al. (1966) sought to investigate psychoanalytic concepts of hysterical, obsessive, and oral personality via factor analysis (only the first two will be discussed here). These researchers drew up an initial self-report, true-false format questionnaire composed of 200 items measuring 20 personality traits. Item-to-trait correlations were calculated and, for each trait of 10 items, the seven items with the highest correlations were retained for the final form. Only 20% of the final 140 statements had item-to-trait correlations of less than .50. Responses of 90 female in- and outpatients at the Massachusetts Mental Health Center (MMHC) were then factor-analyzed. Although five unrotated factors were extracted, three accounted for 90% of the common variance.

Regarding the hysterical factor, of the seven traits which yielded factor loadings greater than .39, five were predicted from Lazare et al.'s (1966) review of the psychoanalytic literature: Emotionality (.64), Exhibitionism (.59), Egocentricity (.58), Sexual Provocativeness (.57), and Dependence (.40). Fear of Sexuality and Suggestibility, which were predicted based on the literature review, had factor loadings of only .10 and -.08, respectively. However, Aggression (.70) and Oral Aggression (.61) were included in the

factor. Emotional Constriction, with a factor loading of $-.61$, was considered as equivalent to Emotionality and so was not included as a defining trait.

Regarding the obsessive factor, of the nine predicted traits, seven had factor loadings greater than $.36$: Orderliness ($.74$), Severe Superego ($.62$), Perseverance ($.54$), Obstinacy ($.54$), Rigidity ($.50$), Rejection of Others ($.38$), and Parsimony ($.37$). Emotional Constriction and Self-Doubt, which had been predicted based on the literature review, had respective loadings of $.35$ and $.12$.

Lazare et al. (1970) repeated their original study with an independent sample of 100 consecutive female inpatient admissions to the MMHC. Again, item-to-trait correlations were computed prior to factor analysis and the seven items with the highest correlations were included. Four of the 140 items in the later study did not appear in the original. As in the first study, 20% of the final 140 items had item-to-trait correlations of less than $.50$. (The items composing the LKTS are appended to this second study.)

Lazare et al.'s (1970) hysterical factor bore a close resemblance to the original factor ($r = .93$ by rank-order correlations). Traits which defined the later hysterical factor (i.e., factor loadings of $.40$ or greater) were: Aggression ($.68$), Emotionality ($.67$), Oral Aggression ($.66$), Obstinacy ($.64$), Exhibitionism ($.53$), and Ego-centricity ($.50$). For the obsessive factor, a rank-order correlation of $.66$ between the factors derived in the two studies was obtained. Traits which defined this factor in the later study (again, factor loadings of $.40$ or greater) were Emotional Constriction ($.67$),

Orderliness (.66), Parsimony (.63), Rigidity (.61), Severe Superego (.55), and Perseverance (.50).

Paykel and Prusoff (1973), in their study of relationships between various personality dimensions, completed their own factor analysis of Lazare et al.'s (1966, 1970) instrument in order to derive their own scoring system. Traits defining the hysterical factor were Oral Aggression, Aggression, Sexual Provocativeness, Obstinacy, Exhibitionism, and Emotionality. The obsessive factor was defined by Rigidity, Orderliness, Parsimony, Severe Superego, Perseverance, and Passivity (negative loading). However, no factor loadings were cited. Of interest here in terms of validity are reported correlations between the hysterical factor and the Maudsley Personality Inventory (Eysenck, 1959) Extraversion scale of .39 ($p < .001$) and the low, nonsignificant correlation between scores on the hysterical and obsessive factors (-.08).

Finally, van den Berg and Helstone (1975) replicated Lazare et al.'s (1966, 1970) work on a Dutch sample of 119 female in- and out-patients, 32 psychology students, and 41 psychiatric nurses. Item-trait correlations were comparable to those originally reported by Lazare et al. (1966, 1970). Split-half reliabilities for the 20 traits ranged from .56 to .78. The percentage of variance accounted for by the factors in the earlier studies and van den Berg and Helstone's loadings) was composed of: Oral Aggression (.74), Aggression (.72), Exhibitionism (.69), Sexual Provocativeness (.63), Egocentricity (.60), and Emotionality (.47). The obsessive factor was composed of: Orderliness (.81), Rigidity (.74), Emotional Constriction (.70), Obstinacy

(.59), Parsimony (.59), Passivity (.59), Perseverance (.59), Severe Superego (.54), and Rejection of Others (.47).

In the present study, the LKTS traits to be scored were determined by examining the past studies and scoring those traits that comprised the relevant factor in either all or three of the four LKTS studies. Thus, scores on the hysterical factor were determined by scoring for the traits of Aggression, Oral Aggression, Emotionality, Exhibitionism (all included in all four studies), Sexual Provocativeness, and Egocentricity (both included in three of the four studies). The obsessive factor scores were determined by scoring for traits included in all four studies: Orderliness, Severe Superego, Perseverance, Rigidity, and Parsimony. Sample items for these traits may be found in Appendix C.

2) Millon Multiaxial Clinical Inventory: Gregarious-Histrionic and Conforming-Compulsive Scales

The Gregarious-Histrionic (GH) and the Conforming-Compulsive (CC) scales of the Millon Multiaxial Clinical Inventory (MMCI) (Millon, 1977) were also used in the present study to assign subjects to appropriate personality style groups. These two scales are among eight MMCI scales which describe basic personality styles. The items composing those two scales were mixed with the items from the MMCI Aggressive-Antisocial scale in order to guard against the subjects' detecting the central focus of the questionnaire.

While the MMCI scales are intended for use with individuals displaying psychopathology, it was felt that the items from the GH and the CC scales would be useful in pinpointing hysterical and obsessive

subjects, respectively. A true-false format is utilized in the test for the subject to describe his or her feelings and attitudes. The 30 items of the GH scale are designed to tap fickle affectivity, sociable self-image, interpersonal seductiveness, cognitive dissociation, and immature stimulus-seeking (Millon, 1977). The 42-item CC scale taps restrained affectivity, conscientious self-image, interpersonal respectfulness, cognitive constriction, and behavioral rigidity (Millon, 1977).

Empirical evaluation of the MMCI has included information regarding reliability (test-retest and internal consistency), internal structure (scale item-overlap and factor analysis), and external correlates (Millon, 1977). Only information concerning the two scales of interest will be presented here. Test-retest reliability was assessed with two separate clinical samples. The first group of 59 patients retok the test after an average period of one week. Reliability coefficients were .91 for the GH scale and .81 for the CC scale. The time interval for the second sample (86 patients) was, on the average, five weeks. Reliability coefficients were .85 for the GH scale and .77 for the CC scale. Internal consistency of the scales was assessed via the Kuder-Richardson Formula 20 (KR-20), using data derived from two clinical samples ($N = 682+297$). KR-20 coefficients were .89 for the GH scale and .84 for the CC scale.

Millon (1977) also examined the internal structure of the MMCI scales. The percent of item overlap between the two scales of interest here was based on Guilford's (1936) formula. This formula weighed similar and opposite scored items on the two scales and then

calculated a ratio based on their relationship to the total number of items composing the scales. Thus, percentages reflected the degree of covariation between the two scales as a function of shared items. For the GH and CC scales, the percent of item overlap was .11 (based on two clinical samples, $N = 682+297$). The intercorrelation between the two scales, based on the same sample, was $-.19$.

Millon (1977) also employed factor analysis to examine the internal structure of the MMCI. Two factor analyses were performed, the first utilizing a general psychiatric population, and the second, a substance misuse population. Four factors were derived in the first factor analysis, with the first three accounting for 85% of the variance. The GH scale loaded $-.856$ on the third factor, which seemed to tap a core pattern of schizoid behavior and thinking. The CC scale loaded $-.747$ on the first factor, which appeared to tap a depressive, unstable emotionality expressed via moodiness and neurotic complaints. This scale also loaded $.598$ on the fourth factor, which seemed to involve social restraint and conformity.

In the second factor analysis, the GH scale loaded $.901$ on the second factor. This factor appeared to tap traits such as social acting-out and aggression. The CC scale again loaded on two factors. A loading of $-.552$ was found on the first factor. This factor seemed to tap "'general psychopathology' variance" (Millon, 1977). The CC scale was one of two scales with a high loading ($.716$) on the fourth factor. The other was alcohol misuse ($.876$).

Millon (1977) also presented evidence for convergent validity of MMCI scales, including GH and CC. Correlational data were obtained

from various clinical samples with the MMCI and three similar diagnostic inventories: the MMPI basic and Wiggins (1966) scales; the Psychological Screening Inventory (PSI) (Layon, 1973); and the Symptom Distress Checklist (SSL-90) (Derogatis, Lipman, & Covi, 1973). Major indicators of the two scales' convergent patterns were as follows (Millon, 1977). For the GH scale (tapping seductive sociability, dramatic attention-seeking, defensive denial, social irresponsibility, and impulsiveness), major salient correlates were: PSI: Expression, .45; MMPI-Basic: Mania, .34; MMPI: Barron's (1953) Ego Strength, .32; PSI: Defensiveness, .23; MMPI: MacAndrew's (1965) Alcoholism, .21; MMPI-Wiggins: Social Maladjustment, -.72; MMPI-Basic: Social Introversion, -.61; MMPI-Wiggins: Depression, -.48; MMPI-Wiggins: Poor Morale, -.44; MMPI-Basic: Depression, -.41; and SCL-90: Interpersonal Sensitivity, -.39 (Millon, 1977).

For the CC scale, which assessed respectful adherence to social convention, restrained hostility, denial of personal deficits, and generalized rigidity, relevant correlations presented by Millon (1977) were as follows: MMPI-Basic: K, .51; MMPI: Ego Strength, .32; MMPI-Wiggins: Religious Fundamentalism, .29; PSI: Defensiveness, .27; MMPI-Wiggins: Hostility, -.57; MMPI-Wiggins: Depression, -.56; MMPI-Wiggins: Poor Morale, -.54; MMPI-Basic: Schizophrenia, -.51; SCL-90: Hostility, -.50; MMPI-Basic: Psychopathic, -.46; PSI: Expression, -.44; MMPI-Wiggins: Family Problems, -.43; MMPI-Wiggins: Authority Conflict, -.42.

3) Myers-Briggs Type Indicator (Form G)

The third and final measure used to assign subjects to a

personality style group was the Myers-Briggs Type Indicator (MBTI) (Myers, 1962). The MBTI is a psychological measure ". . . concerned primarily with variations in normal attitudes and behavior, rather than with psychopathology" (McCaulley, 1981, p. 294), thus rendering it particularly well-suited for the sample in the current study. The instrument was designed to classify a person into a certain type, based on Jung's (1921/1971) system of personality typology.

Four dimensions were assessed by the MBTI. Three of these [extraversion-introversion (EI), sensing-intuition (SN), and thinking-feeling (TF)] are explicit in Jung's theory, while the fourth dimension, judgment-perception (JP), is implicit (McCaulley, 1981). The EI dimension is considered an attitude polarity and indicates whether a person is oriented toward the outer world (i.e., an extravert), focusing his perception and judgment on people and things, or oriented towards the inner world (i.e., an introvert), thereby focusing his perceptions and judgment on concepts and ideas (Myers, 1962).

The SN and TF dimensions are viewed as psychic-functions or mental-process polarities. Sensing and intuition represent two modes of perception and the MBTI indicates whether the person

. . .relies primarily on the familiar process of sensing, by which he is made aware of things directly through one or another of his five senses, or primarily on the less obvious process of intuition, which is understood as indirect perception by way of the unconscious, with the emphasis on ideas or associations which the unconscious tacks on to the outside things perceived (Myers, 1962, pp. 1-2).

The TF dimension discriminates between two ways of judging and indicates whether the person ". . .relies primarily upon thinking, which discriminates impersonally between true and false, or primarily upon

feeling, which discriminates between valued and not-valued" (Myers, 1962, p. 2).

The JP index was included in order to indicate which mode of psychic-functioning [judging (TF) or perceiving (SH)] a person uses in dealing with the external world; that is, the extraverted part of his life. Consequently, ". . .extraverts use the dominant function in the extraverted attitude and the auxiliary in the introverted attitude; introverts use the dominant in the introverted attitude and the auxiliary in the extraverted attitude" (McCaulley, 1981, p. 301).

Thus, the MBTI allows one to classify people on one or the other position on the four dimensions; people are either an I or an E, an S or an N, a T or an F, and a J or a P. The type classification or preference score is designated by combining the four positional indices, for example, an ISTJ type. Thus, sixteen combinations are possible. People are scored on each component of the four dimensions, with the greater value in each pair indicating the direction of the preference and hence, the letter designation of the dimension score. Differences between point totals may be transformed into scores indicating the strength of the preference. Form G, the most recent form of the MBTI and the one which was used in the current study, is composed of 126 forced-choice format items. Items consist of phrase questions and choices of the preferred word in a word pair.

McCaulley (1981) summarized reliability indices gathered from five main sources: the MBTI Manual (Myers, 1962), two reviews (Carlyn, 1977; McCaulley, 1978), and two reports by Carskadon (1977,

1979b). In addition, she also used data she had gathered for the upcoming revision of the MBTI Manual.

Split-half reliabilities for each preference category were reported by McCaulley (1981) for a variety of samples. In nine college student samples, split-half coefficients ranged from .76 to .88 for EI (median of .81), from .75 to .90 for SN (median of .85) from .68 to .86 for TF (median of .77), and from .80 to .85 for JP (median of .82). Ranges for four gifted samples were: .81 to .87 (EI); .76 to .86 (SN); .82 to .84 (TF); and .75 to .94 (JP). Three underachieving samples obtained lower reliabilities: .60 to .81 (EI); .59 to .75 (SN); .17 to .57 (TF); and .62 to .81 (JP). McCaulley (1981) reported that data collected for the revised Manual demonstrated higher reliabilities for older samples and higher intelligence samples. This corroborated Myers' (1962) belief that, since adults and other populations would likely be more developed in terms of type preferences, such samples would probably result in higher internal consistency coefficients.

Test-retest correlations of continuous scores on Form G were computed by Carskadon (1979b). Thirty-two male psychology students retook the test after seven weeks. Stability coefficients were: .79 for EI; .84 for SN; .48 for TF; and .63 for JP. Twenty-seven females in the same class were also retested by Carskadon (1979c) and the following correlations obtained: .86 (EI); .87 (SN); .87 (TF); and .80 (JP).

However, McCaulley (1981) noted that the more significant issue was whether or not individuals came out as the same type on retest.

In nine samples, retested from intervals of five weeks to six years, a range of 31% to 61% came out as the same type (McCaulley, 1981). Interestingly, the highest percentage occurred in the sample retested after the longest time interval (Wright, 1966). Seventy to 88% of the subjects in the nine samples retained three of the original four preferences on retest. Ten to 22% had two preferences in common, and two to seven percent had only one test-retest preference in common. Out of the total composite of 1,444 persons, only one person changed on all four preferences. Studies by Howes and Carskadon (1979) and McCaulley and Kainz (in McCaulley, 1981) indicated that shifts in preference were a function of magnitude of the original preference score.

McCaulley (1981) offered a representative review of data related to the construct validity of the MBTI. In terms of studies involving predictions about certain types, a study of medical students' choices of specialties found such choices to be consistent with type (Myers & Davis, 1964). A follow-up study showed that those who switched specialties moved in a direction more consistent with their type (McCaulley, 1977). Extraverts and introverts differed in behavior exhibited during a three-minute talk given before judges (Carskadon, 1979a). Comparisons of intuitive and sensing types indicated that sensing types tended to emphasize the concrete and the immediately observable, while intuitives tended to infer, go beyond the immediate data, and have a predilection for the abstract (Carlson, 1980; Howland, 1971). MBTI type has been related to performance on memory tasks (Carlson, 1980; Carlson & Levy, 1973). Type differences have also

been demonstrated in terms of interpersonal preferences (Barberousse, 1965; Doering, 1972; Johnson, 1976; Schroeder, 1979).

Type differences in career choice have been demonstrated, offering evidence that people follow career paths which are consistent with their type (McCaulley, 1981). For example, business tends to attract practical, matter-of-fact ST individuals and outgoing, realistic ES types (Conary, 1965; Margerison & Lewis, 1979; McCaulley, 1973; Myers, 1962). Studies have shown NT types to be attracted to science and mathematics (Conary, 1965; McCaulley, 1973, 1976a; Myers, 1962), TJs to law (Miller, 1967), NFs to the humanities and social sciences (Barberousse, 1975; Conary, 1965; McCaulley, 1973, 1978), and SFs to teaching and helping professions (Cage & Austin, 1979; Carlyn, 1976; McCaulley, 1973, 1977, 1978). Judging types have been found among business executives (Ohsawa, 1975), school principals (von Fange, 1961) and police officers (Hanewicz, 1978). Type preferences have also been related to careers requiring creativity and careers in psychology (McCaulley, 1981).

McCaulley (1981) also summarized validity information based on correlations of continuous scores with other measures. [Although the MBTI is scored for a type classification, McCaulley, in her 1981 review, noted that it is possible to derive MBTI continuous scores by setting the midpoint at 100 and subtracting (for E, S, T, or J) or adding (for I, N, F, or P) the numerical portion of the preference score.] Sources for her summary included primarily Myers (1962), McCaulley (1978), and Carlyn (1977), although other sources were also discussed.

Continuous IE scores exhibited correlations ranging from the .50s to the .70s when correlated with other comparable measures, such as the Strong Vocational Interest Blank Occupational Introversion (McCaulley, 1978), MMPI Social Introversion (Stricker & Ross, 1964), Omnibus Personality Inventory (OPI) Social Introversion (McCaulley, 1978), 16PF Extraversion (McCaulley, 1978), and the Maudsley Personality Inventory Extraversion (Cann, 1979; Cropley, 1965; Hogan, 1969; Steele & Kelly, 1976; Wakefield, Sasek, Brubaker, & Friedman, 1976).

Regarding the SN dimension, sensing continuous scores correlated with a pragmatic outlook on the OPI (McCaulley, 1978), economic interests on the Allport-Vernon-Linzey Study of Values (AVL) (Myers, 1962), and shrewdness on the 16 PF (McCaulley, 1978). Intuitive scores were related to intelligence, radicalism, dominance, imagination, independence, and creativity on the 16 PF (McCaulley, 1978); theoretical and aesthetic interests on the AVL; intellectuality and creativity on the Opinion, Attitude, and Interest Survey (OAIS) (McCaulley, 1978); and with theoretical orientation, estheticism, complexity, autonomy, and thinking orientation on the OPI (McCaulley, 1978).

In terms of continuous scores for the TF dimension, thinking has been associated with theoretical orientation and skepticism of religious orthodoxy on the OPI (McCaulley, 1978) and with masculine orientation on the OAIS (McCaulley, 1978) and Holland's Vocational Preference Inventory (Morgan & Kainz, 1973). The feeling dimension has been related to tender-mindedness on the 16 PF. Finally, continuous scores of judging on the JP dimension have been related to

ratings of responsibility and dependability (McCaulley, 1981); measures of superego, control, and leadership on the 16PF (McCaulley, 1978; and with OAIS vocational interests (McCaulley, 1978). Perceiving scores have been associated with needs for autonomy and change on the Edwards Personal Preference Schedule (Myers, 1962) and with tolerance for complexity on the Personality Research Instrument (Myers, 1962).

McCaulley (1981) also noted that ". . . correlations often show a linkage of scales in theoretically understandable ways" (p. 331). Thus, on the 16PF, leadership was related to an E--J type; creativity with -N-P; experimentation with -NTP; tender-mindedness with -NFP; and worldliness with -STJ (McCaulley, 1978).

4) State-Trait Anxiety Inventory

The Trait Anxiety scale of Spielberger et al.'s (1970) State-Trait Anxiety Inventory (STAI A-Trait) was employed to screen for psychopathology and thereby ensure the selection of a normal sample. Trait anxiety has been defined as ". . . relatively stable individual differences in anxiety proneness. . ." (Spielberger et al., 1970, p. 3). The STAI A-Trait scale is comprised of 20 items that ask people to rate how they generally feel on a four-point scale ranging from "Almost Never" to "Almost Always."

Spielberger et al. (1970) presented norms for 377 high school juniors, 982 college freshmen, 484 college students enrolled in an introductory psychology course, 461 male neuropsychiatric patients, 161 general medical and surgical (GMS) patients, and 212 prisoners. Test-retest reliabilities for male ($N = 88$) and female ($N = 109$)

undergraduates ranged from .84 (one-hour interval) to .73 (104 days) for males. Comparable figures for females were, respectively, .76 and .77. Alpha coefficients of internal consistency of the trait scale were computed by formula KR-20 as modified by Cronbach (1951) for male and female freshmen, undergraduate, and high school student samples. Coefficients ranged from .86 to .90 for males and from .86 to .92 for females.

Concurrent validity was assessed by Spielberger et al. (1970) by correlating trait anxiety scores with the IPAT Anxiety Scale (Cattell & Scheier, 1963), the Taylor (1953) Manifest Anxiety Scale, and the Zuckerman (1960) Affect Adjective Checklist. Correlations ranged from .52 to .80 for college females ($N = 126$) and from .58 to .79 for college males ($N = 80$). For neuropsychiatric patients, trait anxiety scores correlated .77 with the IPAT scale and .83 with Taylor's (1953) scale. A recent reviewer of the STAI, Dreger (in Buros, 1978) used the means and standard deviations cited by Spielberger et al. (1970) for their normative sample of specifically diagnosed neuropsychiatric patients, GMA patients with and without psychiatric complications, and prisoners to examine trait anxiety differences between the groups. The trait measure differed in the expected direction. Trait means for all groups of patients except one (character disorders) were higher than for GMS patients without psychiatric complications.

5) Family Density Index

Waldrop and Bell (1964), in their investigation of the relation of preschoolers' dependency behavior to family size and density, defined density as ". . . variations in intervals between siblings, short

intervals denoting high density" (p. 1187). They combined family size with density to derive an index measure of family structure. The researchers considered four variables to be relevant measures of family size and density. These variables could potentially impact on the amount of time available for a mother to give to a particular child. They were: 1) the total number of children in the family; 2) the time interval between that child and the next younger sibling; 3) the time interval between that child and the next older sibling; and 4) the average span of time between births.

Scores for these four variables were obtained for a sample of 44 two-and-a-half year old boys. Means and standard deviations were calculated and intercorrelations were computed. Using Hotelling's principal components method, one factor was extracted from the six intercorrelations. Since correlations of variable 4 with variables 2 and 3 were part-whole correlations, Waldrop and Bell (1964) noted that the contributions of variables 2 and 3 were overestimated. Factor loadings ranged from $-.767$ to $.883$. The small differences between factor loadings led the investigators to believe that there would not be any significant loss of precision in computing the index by combining standard scores for the four variables.

Thus, Waldrop and Bell (1964) provided a conversion table for computing a family size and density index. Weights were provided for total number of children (1-11), number of months (10-40+) to the next younger child, number of months (10-64+) to the next older child, and the average number of months (10-64+) between births. Weights are then summed to determine an index score. For convenience, the last of

the three digits that make up the index is dropped.

6) Infant Temperament Questionnaire (Revised)

The Infant Temperament Questionnaire (ITQ) was devised by Carey (1970) as a means of assessing Thomas et al.'s (1968) dimensions of temperament (their work was discussed previously in the literature review). A revised version of this instrument was published by Carey and McDevitt (1977) in an effort to improve the psychometric characteristics of the questionnaire. The new instrument consists of 95 statements regarding specific infant behaviors. Each statement is rated on a scale ranging from 1 ("almost never") to 6 ("almost always"). Sample items for each of the nine temperament categories (Activity, Rhythmicity, Approach/Withdrawal, Adaptability, Intensity, Mood, Persistence, Distractibility, and Treshold) are presented in Appendix D.

During the pretest stage, the ITQ was expanded from 70 to 110 items (to improve reliability) and the rating scale was expanded from three to six choices. Approximately half of the items were reversed in terms of scoring, so that, for example, "almost always" indicated a high rating in some categories and a low rating in others. This was done in an attempt to decrease tendencies to respond in a socially desirable manner. Finally, items were randomized as to category and content area.

The pretest sample was drawn from private pediatric practices and consisted of 55 mothers of 4- to 8-month-old infants. Intercorrelations were computed on items in each category and items which correlated at .30 or above were retained. Others were discarded or rewritten and other items were added, bringing the number of items to 112.

This 112-item questionnaire was then standardized on ratings of 203 4- to 8-month old infants (104 boys, 99 girls), again drawn from private pediatric practices. The items for each temperament category were again intercorrelated and 17 items were dropped because of correlations less than .30. Means and standard deviations for each category were reported by Carey and McDevitt (1977). Internal consistencies ranged from .49 for Distractibility to .71 for Approach. The median internal consistency coefficient was .57 (Threshold) and the internal consistency coefficient for the entire instrument was .83.

A subsample of the standardization group (41 subjects) was also used for the purpose of test-retest reliability. The time interval was, on the average, approximately three-and-a-half weeks. Test-retest reliabilities ranged from .66 for Intensity to .81 for Mood. The median value was .75 (Rhythmicity; Distractibility) and test-retest reliability for the entire questionnaire was .86.

7) The Parent-Child Relations Questionnaire II

Siegelman and Roe (1979) presented a revised version of their original Parent-Child Relations Questionnaire: the Parent-Child Relations Questionnaire II (PCR II). (This work has also been discussed earlier, in the review of the literature.) According to Siegelman and Roe (1979), the PCR II was ". . .designed to measure the behavior of parents toward their children as perceived by the child" (p. 1) and was ". . .constructed for use with adults who recalled how their parents treated them while they were growing up, especially before the age of 12" (p. 1). The initial PCR was composed

of 10 subtests and 130 items. However, subsequent factor-analytic work yielded three distinct orthogonal factors, two bipolar [Loving-Rejecting (LR) and Casual-Demanding (CD)] and one unipolar [Attention (A)] (Siegelman & Roe, 1979). Thus, the instrument was revised to be factor-pure and now yields scores for the three factors. In addition, analysis of PCR responses indicated differential parental behaviors for sons and daughters, as well as differences between same-sex and cross-sex behaviors (Siegelman & Roe, 1979). The PCR II, therefore, has four forms, for same-sex and cross-sex parents and children.

The PCR II is shorter than the original questionnaire. Each parent-child form is composed of 50 items, 10 each for Loving (L), Rejecting (R), Casual (C), Demanding (D), and Attention (A). (Descriptions of the behaviors are available in Appendix E.) Each statement regarding the reference parent is rated on a four-point scale, ranging from "Very True" to "Very Untrue." For daughters, 33 items are identical for both mother and father forms. For sons, 32 items are the same on both forms. Scores are computed for each of the five categories (range: 10-40) and factor scores than calculated. For Attention, the factor score is simply the category score. The factor score for LR is computed by subtracting the R score from the L score and adding 50 (to eliminate negative scores). For CD, D is subtracted from C and 50 is again added.

Siegelman and Roe (1979) presented KR-20 reliability coefficients based on three white [New York (NY), Louisiana and Georgia (LA & GA), and Arizona (AZ)] and one black (LA & GA) samples. For sons, reliability ranges were as follows: NY, .65 to .75; LA & GA (White), .68

to .94; AZ, .63 to .96; LA & GA (Black), .66 to .93. For daughters, the ranges were: DNY, .73 to .95; LA & GA (White), .64 to .97; AZ, .69 to .95; LA & GA (Black), .72 to .94. Reliabilities for the entire White sample ranged, for sons, from .75 to .95, and for daughters, from .76 to .95. Means, standard deviations, and percentiles (for the total White son and daughter sample) were also presented by Siegelman and Roe (1979).

Content validity for the PCR was demonstrated by the unanimous agreement of four judges that particular items, chosen from a large pool of items, belonged to a certain category (Siegelman & Roe, 1979). These items were eventually factor-analyzed and those with the highest loadings chosen for inclusion in the respective PCR II category. Interfactor correlations, deemed "satisfactorily low" by Siegelman and Roe (1979), ranged from .01 to .46 for factor scores for fathers and .04 to .33 for factor scores for mothers.

Siegelman and Roe (1979) also presented rotated factor loadings for all sons, all daughters, and their total White sample in order to demonstrate the factorial validity of the PCR II. Overall, high factor saturations were evident. For the LR factor for sons (White and Black samples), loadings ranged from .84 to .93 for L and $-.89$ to $-.96$ for R (Loadings for C, D, and A ranged from .04 to $-.42$). For daughters (White and Black samples), loadings ranged from .89 to .95 (L) and $-.89$ to $-.96$ (R) (loadings for C, D, and A ranged from .03 to .45). Finally, for the total White sample, factor loadings on L ranged from .90 to .93 and for R, from $-.93$ to $-.96$. The range for C, D, and A was from $-.01$ to $-.26$.

For the CD factor for sons (White and Black samples), factor loadings for C ranged from .81 to .95 and for D, from -.43 to -.94. Loadings for L, R, and A on the CD factor ranged from .00 to -.22. For daughters (White and Black samples), loadings on C ranged from .42 to .94 and on D, from -.58 to -.96. Loadings on L, R, and A ranged from .00 to -.34. For the total White sample, C loadings ranged from .84 to .93 and D loadings ranged from -.86 to -.92. L, R, and A loaded from .00 to -.17.

Finally, on the A factor for sons (White and Black samples), loadings ranged from .84 to .99. Factor loadings for L, R, C, and D on A ranged from .02 to .40. For daughters (White and Black samples), A loadings ranged from .77 to .99, while L, R, C, and D loaded from .00 to .82 on the A factor. Factor loadings on the A factor for the total White sample ranged from .96 to .98. Factor loadings for L, R, C, and D ranged from -.01 to .41.

The only validation of the PCR II cited by Siegelman and Roe (1979) concerned a study by Tiboni (1976), in which he found high correlations between PCR II scores for mothers and sons. Limited information concerning concurrent (Cox, 1966) and construct (Siegelman, 1965, 1973) validity on the PCR is available.

Procedure

Subjects were solicited in introductory and advanced psychology classes during Spring and Summer Sessions, 1982. Packets including the LKTS, MMCI, MBTI (Form G), STAI A-Trait scale, a face sheet (requesting age, sex, year in school, and race) and a consent form (see

Appendix F) were then distributed to interested students. In order to maintain confidentiality, students chose identification codes with which to mark their packets. However, they also signed a master list, so that subjects' identities could be ascertained for assigning research credit and so that certain, selected students could be later contacted to complete additional measures.

Eighty-two students during Spring and 52 students during Summer returned packets. Sixty-four subjects were selected from this group and categorized into two experimental groups, Hysterical Personality Style (HPS) ($N = 19$) and Obsessive Personality Style (OPS) ($N = 17$), and one control group, Blended Personality Style (BPS) (i.e., a blend of personality features; $N = 28$). The composition of this sample is presented in Appendix G. Classification criteria were based on the LKTS, MMCI, AND MBTI, and were as follows for the experimental groups:

1) Scores at or above the median in the LKTS and MMCI score distributions. The medians for Spring were: LKTS-Hysterical, 19; LKTS-Obsessive, 20; MMCI-Histrionic, 19; MMCI-Compulsive, 24. Medians for Summer subjects were LKTS-Hysterical, 17; LKTS-Obsessive, 18; MMCI-Histrionic, 19; MMCI-Compulsive, 26.

2) Classification into an MBTI typology consistent with either an hysterical or obsessive personality style. Particular attention was focused on the EI and TF dimensions, based on theoretical considerations that E and/or F would be consistent with an hysterical style and that I and/or T would be consistent with an hysterical style and that I and/or T would be consistent with an obsessive style. The prototypical hysterical style was considered to be ENFP and the exemplar

of the obsessive style, ISTJ. In the actual sample, 37% of the HPS group was classified as ENFP and 18% of the OBS group as ISTJ. The distribution of types in each group is displayed in Appendix H.

3) The initial plan was to utilize a cut-off on the STAI A-Trait scale in order to ensure a normal sample. However, as the number of potential subjects decreased due to the above classification criteria, the cut-off score was raised higher and higher until it became meaningless to employ. Therefore, although STAI A-Trait data was gathered, it was not used in the manner intended.

In order to qualify for the BPS control group, the following criteria had to be met:

1) Score(s) below the median on at least one LKTS or MMCI scale.

2) Classification into an MBTI typology considered, again on theoretical grounds, to not be indicative of a strong leaning toward either an hysterical or obsessive style. For approximately 82% of the control subjects, this meant the combination of E with T or I with F (see Appendix H). Eight percent of the controls ($N = 2$; one ISTP and one ESFJ) seemed to evidence some other mixture of features. Eleven percent of the control MBTI types [Two (7%) INTPs and one (4%) ESFP] were also represented in the experimental groups (INTPs = 6% of the OPS sample; ESFP = 16% of the HPS sample). However, the two control group INTPs had scores below the median on both LKTS-Obsessive and MMCI-Compulsive scales. The control group ESFP demonstrated an LKTS-Hysterical score below the median and an MMCI-Histrionic score one point above the median. It was thus felt that these three subjects were representative of a mixed personality style.

Differences between subjects in the three groups on characteristics such as age, STAI A-Trait, and LKTS and MMCI scores are presented in Appendix I. One-way analyses of variance indicated that there were no significant age or anxiety-proneness differences. As expected, OPS subjects were significantly higher than the other two groups on the appropriate LKTS and MMCI measures. The same was true for HPS subjects on their scales.

Subjects who met the above criteria were asked to return to complete a form requesting birth order and family density information (subject's sex, subject's birthdate, sex of subject's siblings, and siblings' birthdates) and the Mother and Father forms of the PCR II. Another consent form was also signed (see Appendix J). Additional research credit was assigned for this second phase of the study. These subjects were then requested to bring (or mail, with postage provided by the experimenter) home a copy of the ITQ. This was to be completed by the parent who was the subject's primary caretaker during his or her first year of life. (Research credit was also assigned for this third phase of the project.) Also included was a letter from the experimenter to the parent (Appendix K; the letter was modified somewhat for the parents of the Summer sample by requesting a return date), a consent form (Appendix L; modified if the student was not to receive credit), and an information sheet. This sheet ascertained whether or not the individual had been the subject's primary caretaker during his or her first of life and relation to the subject. The sheet also contained space for comments regarding the difficulty of the task.

In both the HPS and the OBS groups, of the parents who filled out the sheet (HPS Group = 14; OPS Group = 12), the mother had been the primary caretaker and had also completed the ITQ. In the BPS group, of the parents who filled out the sheet (N = 18), two had not been the primary caretaker while 16 had. Fifteen of the parents who completed the ITQ were the mother and three were the father. Of the parents who commented on the difficulty of completing the ITQ, 17 found it difficult and 21 found it easy.

Of the 64 subjects who were given ITQ packets, parents of 44 subjects (69%) completed and returned the information. However, one subject in the HPS group did not supply the necessary information to compute a family density index. Therefore, 43 complete sets of data were available. Differences between subjects in the three groups who had supplied complete sets of data on age, STAI A-Trait, and LKTS and MMCI scales are displayed in Appendix M. Results paralleled those for the total sample (displayed in Appendix I).

A discriminant function analysis was utilized in this study to detect the combination of dependent variables that would most effectively distinguish the HPS, OPS, and BPS groups. Quantified variables included: Family Density index; scores on the nine temperament categories from the ITQ; and LR, CD, and A factor scores for both parents from the PCR II. Birth order was entered in as the absolute numerical rank of the subject in his or her family.

Additional analyses, focused on individual variables, included a chi-square analysis to test the hypotheses regarding Birth Order. Two-way analyses of variance (Sex X Personality Style) were also employed

to test the hypotheses regarding Parenting Styles and Temperament and to examine relationships for Family Density.

CHAPTER IV

RESULTS

Birth Order

The hypothesis that the Obsessive Personality Style (OPS) group would be likely to contain more eldest or only children than the Hysterical Personality Style (HPS) or the Blended Personality Style (BPS) groups was tested via a chi-square analysis. A 2 (OPS vs. HPS and BPS) x 2 (Only/Eldest Status vs. Middle/Youngest Statuses) table was formed to compare observed and expected frequencies. Results suggested that there were no differences between observed and expected frequency distributions for the four cells, $\chi^2(1) = .27$, n.s. However, while the results were not significant, it must be noted that one of the cells (OPS x Only/Eldest Status) had an expected frequency of less than 10, indicating that the hypothesis was not actually tested.

It was also hypothesized that the HPS group would be likely to contain more youngest children than the OPS and BPS groups. Again, a 2 (HPS vs. OPS and BPS) x 2 (Youngest Status vs. Eldest/Only/Middle Statuses) table was used to compare observed and expected frequencies. The results obtained suggested that there were no differences between observed and expected frequency distributions for the four cells, $\chi^2(1) = .0086$, n.s. However, while the results once again were not significant, it must be noted that two of the

cells (HPS x Youngest Status; OPS and BPS x Youngest Status) obtained expected frequencies of less than 10. Thus, again, the hypothesis must be considered essentially untested.

Parenting Styles

It was hypothesized that the HPS group would be more likely to report more Loving, Casual, and greater Attention scores on the parenting dimensions than would the OPS and BPS groups. At the same time, it was also hypothesized that the OPS group would be more likely than the other two groups to report scores in the Rejecting, Demanding, and less Attention directions.

A 2 (Male and Female) x 3 (HPS, OPS, and BPS groups) analysis of variance (ANOVA) was used to test these hypotheses. The variable of gender was included in the analysis in order to detect any differential sex effects. Results indicated a significant main effect for personality style on the Casual-Demanding factor for mothers' past behavior, $F(2) = 5.032$, $p < .05$ (see Table 1). However, a significant Sex x Personality Style interaction for this variable was also obtained, $F(2) = 3.465$, $p < .05$ (see Table 1). An examination of mean scores for this variable (see Table 2) indicates that females in the HPS group reported that their mothers had been significantly more casual with them than had the mothers of the females in the OPS group. Thus, the hypotheses regarding the Casual-Demanding dimension were supported for the mothers of females in the HPS and the OPS groups. However, no other parenting style hypotheses were supported.

Table 1

2 x 3 ANOVA for Casual-Demanding Dimension of Mothers' Past Behavior

Source	Sum of Squares	<u>df</u>	Mean Square	<u>F</u>
Main Effects				
Personality Style	661.52	2	330.76	5.03*
Sex	45.26	1	45.26	0.69
Interactions				
Personality Style x Sex	455.48	2	227.74	3.47*

*p < .05

Table 2

Mean Scores for Hysterical, Obsessive, and Blended Personality Styles
on Casual-Demanding Dimension of Mothers' Past Behavior

		SEX	
		Male	Female
PERSONALITY STYLE	Obsessive	47.09 (<u>n</u> = 11)	37.17 (<u>n</u> = 6)
	Hysterical	47.80 (<u>n</u> = 5)	53.29 (<u>n</u> = 14)
	Blended	48.00 (<u>n</u> = 11)	46.94 (<u>n</u> = 17)

Family Density

No specific hypotheses were made regarding the relationship between Family Density and Personality Style. Again, a 2 x 3 ANOVA was conducted. Results revealed no significant main effects or interaction for this variable. Thus, there was no evidence to support the impact of Family Density, in and of itself, on development into the personality styles under study here.

Temperament

Once again, 2 x 3 ANOVAs were conducted in order to test the hypotheses for the personality style groups. Significant differences between groups on four temperament categories were found. The temperament categories were Approach/Withdrawal, Adaptability, Mood, and Distractibility. Only the hypotheses for these four variables will be restated in this section. Means for these variables are displayed in Table 3.

It was predicted that the HPS group would have been rated as more Approaching (lower scores) than the other two groups, while the OPS group would have been rated as more Withdrawing (higher scores) relative to the other two groups. The 2 x 3 ANOVA indicated a significant main effect for Personality Style, $F(2) = 3.64$, $p < .05$ (see Table 4). Student-Newman-Keuls a posteriori comparisons indicated that the HPS group had been rated as having been significantly more Approaching than the BPS group, but not the OPS group. Thus, the hypothesis for the HPS' group was only partially supported and the hypothesis for the OPS group was not supported.

Table 3

Mean Scores for Hysterical, Obsessive, and Blended Personality Styles
on Temperament Categories of Approach/Withdrawal, Adaptability,
Mood, and Distractibility

	PERSONALITY STYLE		
	Hysterical ^a	Obsessive ^b	Blended ^c
Approach	2.70	3.29	3.48
Adaptability	2.37	2.69	3.16
TEMPERAMENT			
Mood	2.59	2.94	3.61
CATEGORIES			
Distractibility	2.45	2.53	2.97

^a_n = 14

^b_n = 12

^c_n = 18

Table 4

2 x 3 ANOVA for Temperament Category of Approach/Withdrawal

Source	Sum of Squares	<u>df</u>	Mean Square	<u>F</u>
Main Effects				
Personality Style	5.28	2	2.64	3.64*
Sex	0.33	1	0.33	0.45
Interactions				
Personality Style x Sex	0.99	2	0.50	0.68

*p < .05

Hypotheses regarding Adaptability were that the HPS group would have been rated more Adaptable (lower scores) than the other two groups and that the OPS group would have been rated as least Adaptable (higher scores) relative to the other two groups. The 2 x 3 ANOVA revealed a significant main effect for Personality Style, $F(2) = 6.05$, $p < .01$ (see Table 5). Student-Newman-Keuls a posteriori comparisons revealed that the HPS group had been rated by their primary caretakers as having been significantly more adapting to new stimuli and situations than the BPS group. The OPS group did not differ significantly from either of the other two groups. Thus, the hypothesis for Adaptability and the HPS group received partial support, while the hypothesis for the OPS group was not supported.

Regarding Mood, it was hypothesized that the HPS group would be rated as having had significantly more positive mood (lower scores) relative to the other two groups, while the OPS group would have manifested the most negative mood (higher scores) of the three groups. The 2 x 3 ANOVA showed a significant main effect for Personality Style, $F(2) = 10.12$, $p < .001$ (see Table 6). Student-Newman-Keuls a posteriori comparisons showed that the HPS and the OPS groups did not differ significantly in Mood ratings. However, both groups were rated as having significantly more positive mood as infants than those in the BPS group. The hypothesis for the HPS group was, again, partially supported, while the hypothesis for the OPS group was not.

Finally, predictions were made that the HPS group would have been rated more Distractible (lower scores) as infants in comparison to the other two groups, while the OPS group would have been rated

Table 5

2 x 3 ANOVA for Temperament Category of Adaptability

Source	Sum of Squares	<u>df</u>	Mean Square	<u>F</u>
Main Effects				
Personality Style	5.15	2	2.57	6.05**
Sex	0.37	1	0.37	0.88
Interactions				
Personality Style x Sex	0.28	2	0.14	0.33

**p < .01

Table 6

2 x 3 ANOVA for Temperament Category of Mood

Source	Sum of Squares	<u>df</u>	Mean Square	<u>F</u>
Main Effects				
Personality Style	8.53	2	4.26	10.12***
Sex	0.20	1	0.20	0.50
Interactions				
Personality Style x Sex	0.59	2	0.27	0.65

***p < .001

more nondistractible (higher scores) than the other two groups. The 2 x 3 ANOVA demonstrated a significant main effect for Personality Style, $F(2) = 5.45$, $p < .01$ (see Table 7). Student-Newman-Keuls a posteriori comparisons revealed that the HPS and the OPS groups did not differ in their scores and that both groups were rated as having been significantly more Distractible than the BPS group.

Discriminant Function Analysis

As stated previously, the current study is also focused on the combination of developmental variables best associated with the hysterical and obsessive styles. More specifically, a further aim of the research is to examine the relative contributions of social and constitutional variables in the development of hysterical and obsessive styles. In order to determine and examine the relative contributions of the developmental variables studied here, a discriminant function analysis was employed. This statistical technique allows for the separation of groups based on weighted linear combinations (i.e., functions) of variables and for the examination of the relative weightings of each variable in the function. Ideally, two significant functions would be obtained, one separating the HPS group from the OPS and the BPS groups, and the other separating the OPS from the HPS and the BPS groups.

A discriminant analysis takes variables on which groups are expected to differ and weights and linearly combines selected variables in order to force the groups to be as statistically distinct as possible. In the present study, 17 variables were examined in a step-wise

Table 7

2 x 3 ANOVA for Temperament Category of Distractibility

Source	Sum of Squares	<u>df</u>	Mean Square	<u>F</u>
Main Effects				
Personality Style	2.50	2	1.25	5.45**
Sex	0.002	1	0.002	0.01
Interactions				
Personality Style x Sex	0.58	2	0.29	1.27

**p <.01

fashion (see next paragraph) in order to determine the maximally-discriminating weighted linear combinations. The 17 variables were: the subject's absolute birth order (e.g., if the subject was the third child, the value "3" was coded); the Family Density index; scores on the three parenting dimensions (Loving-Rejecting; Casual-Demanding; and Attention) regarding both mothers' and fathers' past behaviors; and retrospective scores on the nine temperament categories. The step-wise selection procedure chooses variables to include in the function based on a specified selection criterion. In the current investigation, minimum Wilks' lambda was used as the selection criterion. Basically, this selection criterion requires that Wilks' lambda (which is a measure of discrimination among the groups) be kept at a minimum, since the lower is Wilks' lambda, the greater is the discrimination among the groups.

The step-wise selection procedure first chooses the single variable that best discriminates, or separates, the groups (of personality styles). This variable is then paired with each of the other variables, one at a time, and the selection criterion is computed. The second variable which, when combined with the first variable, will produce the best criterion value, is then selected as part of the weighted linear combination, or discriminant function. These two are then combined with the remaining variables, one at a time, to form triads that are again evaluated on the criterion. The triad that produces the best discrimination based on the selection criterion is then determined. This process continues until all variables are selected or discrimination can no longer be improved.

In the present study, a combination of seven of the 17 variables was selected as providing maximum discrimination. These were, in order of inclusion: Mood; the Casual-Demanding dimension for mothers' past behavior; the Loving-Rejecting dimension for fathers' past behavior; Distractibility; the Attention dimension for mothers' past behavior; Persistence; and Approach/Withdrawal. Two functions were derived from these variables.

The discriminant procedure allows for the evaluation of the relative importance of the functions. A certain amount of discriminating power exists within the variables and Wilks' lambda is an index of the amount that is present: The larger lambda is, the less discriminating power is present. In the lower half of Table 8, the value of Wilks' lambda, prior to the removal of any discriminating information is .36. This indicates that a good deal of discriminating information is present in the seven variables. The chi-square test of statistical significance indicates that a lambda of this magnitude or smaller has a .0006 probability of occurring due to the chances of sampling even if there was no further information to be accounted for by a first function in the population, $\chi^2(14) = 37.74$, $p = .0006$. After a certain amount of discriminating information has been removed by placing it into the first function, lambda increases to .71. However, a statistically significant amount of discriminating information still remains to be picked up by the second function, $\chi^2(6) = 12.56$, $p = .05$ (see Table 8, lower half). Thus, while a great deal of statistically significant discriminating power was removed from the variables by placing that information into the first function, a statistically

Table 8

Canonical Discriminant Functions

Function	Eigenvalue	Percent of Variance	Canonical Correlation		
1	0.97	70.70	.70		
2	0.40	29.30	.54		

After Function	Wilks' Lambda	Chi-Squared	<u>df</u>	Significance
0	.36	37.74	14	.0006
1	.71	12.56	6	.05

significant amount of information still remained to be picked up by the second function.

In addition to the changes in Wilks' lambda and the associated shifts in amount of discriminating information present in the discriminating variables, it is also possible to examine the relative percentage of eigenvalue associated with the respective function. The eigenvalue is a measure of the relative importance of the function. The eigenvalues for the functions, when summed, give a measure of the total variance present in the discriminating variables. Each respective eigenvalue is then divided by this sum in order to derive a percentage of the total sum of the eigenvalues, thereby supplying an indicator of the respective function's relative importance. In the top part of Table 8, it can be seen that Function 1, with a relative percentage of eigenvalue of 70.70, is relatively more important than Function 2.

The canonical correlation is a measure of how closely the function and the "group variable" (in this case, personality style) are related. The canonical correlation squared can be interpreted as the proportion of variance in the discriminating function explained by the groups. As can be seen in Table 8, Function 1 is highly correlated and Function 2 is moderately correlated with the groups. The canonical correlation of .70 between Function 1 and the three personality styles indicates that 49% of the variance in discriminant scores for the first function may be accounted for by group differences. Function 2's canonical correlation of .54 indicates that 29% of the variability in discriminant scores may be accounted for by group differences.

The relative weightings of the variables in the functions may be interpreted as in a factor analysis. Table 9 displays the standardized discriminant function coefficients. Thus, Function 1 is most heavily influenced, in a positive direction, by Mood and Distractibility, and, in a negative direction, by the Loving-Rejecting dimension (for fathers) and the Attention dimension (for mothers). A plot of the discriminant scores (i.e., each subject's score on the respective function) for each group on Function 1 revealed that that function separated the HPS group from the BPS group; scores of subjects in the OPS group were distributed across both groups. Thus, the HPS group may be distinguished from the BPS group in terms of negative mood as an infant, a rejecting father, nondistractibility as an infant, and low attention from the mother.

The standardized discriminant function coefficients for Function 2 are also displayed in Table 9. This function is weighted most heavily, in the positive direction, on Mood, the Casual-Demanding dimension (for mothers), and the Loving-Rejecting dimension (for fathers). Variables making a strong, relative negative contribution to Function 2 were Persistence and Approach/Withdrawal. The plot of discriminant scores revealed that Function 2 separated the OPS group from the HPS and the BPS groups in terms of negative mood, a casual mother, a loving father, persistence as an infant, and approaching behavior as an infant.

Group centroids are the mean discriminant scores for each group on the respective function. The group centroids for the three personality style groups are displayed in Table 10. On Function 1,

Table 9

Standardized Canonical Discriminant Function Coefficients

Variables	Function 1	Function 2
Mood	.64	.89
Casual-Demanding (Mothers)	-.15	.84
Loving-Rejecting (Fathers)	-.56	.50
Distractibility	.49	.34
Attention (Mothers)	-.41	-.19
Persistence	.15	-.69
Approach/Withdrawal	-.14	-.62

Table 10

Canonical Discriminant Functions Evaluated at Group Centroids

Personality Style Group	Function 1	Function 2
Hysterical	-1.19	-0.53
Obsessive	-0.28	-0.97
Blended	1.05	0.26

the BPS group had the highest mean discriminant score, followed by the OPS group, and finally, the HPS group. On Function 2, the BPS group again had the highest mean discriminant scores, followed by the HPS group and finally, the OPS group. Since Function 2 crosses Function 1 at a right angle (i.e., is orthogonal to Function 1), it is possible to plot these points in two-dimensional space. One can thus summarize the group locations in the reduced space defined by the discriminant functions (see Figure 1).

Finally, the discriminant procedure allows for a classification of the members of the original groups into groups based on their discriminant scores. When the 43 subjects who had complete sets of data were classified, approximately 74% were correctly grouped: 69% of the HPS group, 67% of the OPS group, and 83% of the BPS group.

In summary, two functions, both containing statistically significant amounts of discriminating information, were derived in the current analysis. The functions consisted of weighted linear combinations of seven variables that had been found to maximally separate the three personality style groups. These variables were: Mood; the Casual-Demanding dimension (for mothers); the Loving-Rejecting dimension (for fathers); Distractibility; the Attention dimension (for mothers); Persistence; and Approach/Withdrawal. The first function separated the HPS group from the BPS group based most heavily on negative mood as an infant, a rejecting father, nondistractibility as an infant, and low attention from the mother. Function 2 distinguished the OPS group from the HPS and the BPS group. This function separated the groups based primarily on negative mood as an infant,

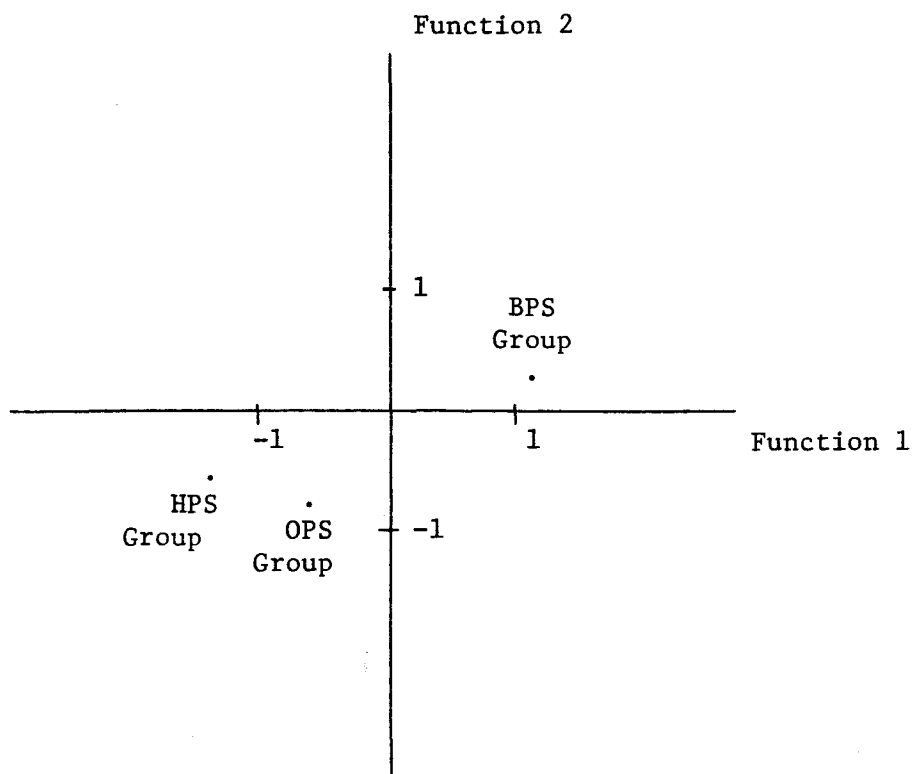


Figure 1. Personality Style Groups' Locations in the Reduced Space Defined by the Discriminant Functions

a casual mother, a loving father, persistence as an infant, and approaching behavior as an infant. Though both functions contained statistically significant amounts of discriminating information, Function 1 was relatively more important (i.e., contained more discriminating information and had more of its discriminant score variance accounted for by group differences) than Function 2. However, the functions did only a fair job in classifying subjects into their correct groups on the basis of their discriminant scores.

CHAPTER V

DISCUSSION

Personality styles, formed through the interaction of social and constitutional variables, may fall within an adaptive, "normal" or maladaptive, abnormal range of functioning. The current study has focused on the "normal" range and examined the developmental correlates of two contrasting styles of personality, the hysterical and the obsessive. Little empirical work has been done on social variables (e.g., birth order, parenting styles, and family density) and constitutional variables (e.g., temperament) in relation to these styles. Thus, the goal of this study was to examine the effects of these variables, alone and in combination, on the development of hysterical and obsessive styles.

Regarding the influence of individual variables, a significant interaction between sex and personality style was found on the Casual-Demanding dimension of mothers' past behavior. Thus, in the current sample, females with hysterical personalities recalled their mothers as having been more casual and females with obsessive personalities viewed their mothers as having been more demanding. This suggests that the mothers may have exerted a particularly strong influence on their daughters, but not on sons, in terms of hysterical or obsessive development. The casual vs. demanding features of this dimension are

described in Appendix E. In general, mothers of females with hysterical personalities in this sample were perceived as having set fewer rules, not having pushed the rules, and having been easy-going parents. In contrast, the mothers of obsessive females in the current sample were perceived as having been authoritative and willing to use punishment. However, this finding only partially confirms the hypothesis for this dimension of parenting, since no effects were found for males or for fathers. Other parenting styles' hypotheses were also not supported. It is interesting to note that mothers were not seen as rejecting by females with hysterical personalities, suggesting that earlier descriptions of these mothers as cold and detached may indeed have been an artifact of sampling an abnormal population.

Partial support was also found for hypotheses regarding relationships between hysterical personality and temperament variables of Approach/Withdrawal, Adaptability, Mood, and Distractibility. In the present sample, people with hysterical personalities were rated as having been both more approaching (i.e., more positive in initial response to a novel stimulus) and more adaptable (i.e., demonstrating greater modifiability of initial response) than those with blended personality styles. This finding is consistent with expected constitutional precursors of hysterical personality. However, ideally the HPS group would have been more adaptable and more approaching than both the OPS and the BPS groups; OPS group means on these temperament categories fell in-between the HPS and the BPS means. For Approach/Withdrawal, the OPS group is much closer to the BPS group (difference between means of .19) than it is to the HPS group

(difference between means of .59), suggesting that the OPS group came close to being significantly less approaching (like the BPS group) than the HPS group. However, this type of patterning was not demonstrated with Adaptability.

Two other temperament variables also exhibited significant differences in the present sample. On Mood, subjects with hysterical and with obsessive personalities were rated as having had a more positive disposition as infants than those with blended personality styles. This again offers partial support for the hypothesis regarding hysterical personality, since it is plausible that they would have demonstrated a brighter mood as infants. However, hysterical and obsessive personalities are not opposed on Mood, as one might have expected. Indeed, it was the BPS group that was rated as having had the most negative disposition as infants.

A similar patterning of results also occurred for Distractibility: Those with hysterical and those with obsessive personalities were rated as having been more distractible than subjects with blended personality styles. HPS group members exhibiting greater distractibility relative to BPS subjects is plausible. However, it is difficult to explain theoretically why OPS group subjects did not differ from the HPS subjects in the expected manner, but rather, were more similar to them. One might argue that the BPS group was less distractible because of a lower anxiety level. BPS subjects may be relatively more "well-rounded" individuals who can handle life situations in a more varied, flexible, and effective manner than someone who likely tends to respond to events in the same manner across situations. In addition,

the world is likely to respond more positively to such flexible persons. Thus, relatively greater anxiety would be manifested in higher distractibility scores for the "pure" types, the HPS and OPS subjects.

However, as indicated in Appendix I, the three groups did not differ significantly in trait anxiety levels. On the contrary, the scores indicate that the BPS group was highest in trait anxiety of the three groups. The mood results, indicating that the HPS and the OPS subjects were more positive in mood than were BPS subjects, also suggests that BPS group members do not have lower anxiety levels relative to the other two groups. The results from the analyses of temperament variables seem to suggest that the BPS group may be a less "healthy" group than the HPS and the OPS groups. Whether these findings would replicate, as well as why they might be so, are questions for further speculation and further empirical investigation.

Finally, the discriminant function analysis resulted in two significant functions, one which separated HPS group subjects from BPS group subjects and another which distinguished OPS group members from subjects in the HPS and the BPS groups. The first function indicated that subjects with hysterical personalities were distinguishable from those with blended personalities in terms of: negative mood as an infant; a rejecting father; nondistractibility as an infant; low attention from the mother; nonpersistence as an infant; a demanding mother; and approaching behavior as an infant. The first four of these are, relative to the others, the most important. The second function indicated that subjects with obsessive personalities were

distinguishable from subjects with hysterical and blended styles in terms of: negative mood as infants; a casual mother; persistent behavior as an infant; approaching behavior as an infant; a loving father; nondistractibility as an infant; and low attention from the mother. The first five of these are, relative to the others, the most important. These combinations of variables account for the differences between, first, hysterical and blended personalities in the current sample; and second, between obsessive personalities and hysterical and blended styles in the present sample. The combinations also demonstrate the relative weightings of social and constitutional developmental variables in personality styles.

Overall, methodological flaws will always become evident as a result of actually executing the study. Because the number of subjects utilized in the discriminant analysis was small, the findings may not replicate. A larger sample was needed to examine birth order effects, which may be regarded as untested in the current study. It should be noted that the Personality Style x Sex interaction for the Casual-Demanding dimension must be interpreted cautiously, due to the small number of subjects in the female obsessive group ($n = 6$, see Table 2).

The study's retrospective design may also have affected the findings, thereby necessitating caution in interpreting results and drawing conclusions. Results from a retrospective study must be considered from two perspectives. The first is the perspective of reality, which assumes that the results reflect actual biographical/etiological factors and are, in effect, "true." Toward this end, PCR II items were written to consider only behavior, not attitudes or feelings. In

a similar vein, ITQ items refer to specific infant behaviors, which would presumably be less susceptible to distortion. However, the second perspective deals with perception of reality. People with different styles of personality may systematically vary in the way they organize and recall their past experiences. For example, people with hysterical styles may be overly optimistic in reporting past events. In addition, the subjects' parents could interpret their offspring's past behavior in terms of current behavior. It would thus be naive to think that the results obtained here reflect one or the other of these perspectives. They likely reflect an interaction of the two and should be interpreted with this in mind. However, it may be argued that an individual's experience of reality is what is important.

Another possible problem in the present study, which has the potential to be a major flaw, concerns the criteria for defining the groups. The traits scored in order to derive hysterical and obsessive personality classifications on the Lazare-Klerman Traits Scales (LKTS) were selected by choosing traits based on previous research using abnormal groups. However, a more desirable approach would have been to factor analyze the LKTS using a normal population and thereby derive the traits to be scored as factors. In addition, the Myers-Briggs Type Indicator may not have been an optimal choice as a selection device since the scales do not directly assess hysterical and obsessive styles. While it is not possible to definitively establish whether or not the groups were accurately formed, the use of three instruments tapping similar characteristics would likely result in a high degree of probability that the subjects were actually representative members

of their respective groups.

Finally, the discriminant function analysis may not have been the most appropriate statistic for addressing the issue of relative influence of social and constitutional variables in this study. While the analysis provided weighted combinations that account for differences between the groups, it did not indicate which variables are best associated with each style. A multiple regression analysis may have been a more appropriate choice.

Research on the development of hysterical and obsessive styles is quite scarce (with the exception of toilet-training practices and the development of obsessive style) and additional focus on relevant variables is clearly indicated. Birth order's relation to the development of these styles was not tested here and hence, it remains a variable of potential interest. Although family density did not yield any significant results in the current study, it has not been investigated before in relation to these styles and bears further study. Studies attempting to replicate part or all of the present study would contribute to the fund of knowledge surrounding hysterical and obsessive styles. In particular, future research should address the possible constitutional variables associated with these styles, since past work seems to have focused relatively more heavily on social variables.

However, while additional studies of developmental correlates would be helpful and interesting, it seems that more basic issues regarding the empirical examination of these styles, particularly hysterical style, need to be addressed. Thus, it was noted earlier

that the hysterical style is not well-documented empirically, in contrast to the obsessive style. An important issue for future researchers to address is, exactly what is hysterical personality? Descriptive correlates need to be better delineated and better validation of the construct is indicated. For both hysterical and obsessive styles, studies of development and description/construct validation should also focus on normal groups, since so much work has been done using abnormal populations. Finally, an interesting issue that should be addressed is whether hysterical and obsessive styles are opposite ends of a continuum or separate, independent dimensions.

Thus, the current study seems to support the notion of the impact of both social and constitutional variables on the development of hysterical and obsessive styles. While the present findings are tentative and exploratory (given the lack of prior empirical research focus), they nevertheless suggest multiple influences on these styles' development and indicate routes for future studies.

SUMMARY

The present study was concerned with investigating the impact of both social (birth order, family density, and parenting styles) and constitutional (temperament) developmental variables, alone and in combination, on hysterical and obsessive personality styles. Subjects were classified into three groups: Hysterical Personality Style (HPS), Obsessive Personality Style (OPS), and Blended Personality Style (BPS). Measures were then taken to assess birth order, family density, perceived recalled parenting styles, and early temperament. Regarding individual variables, results indicated that females in the HPS group rated their mothers as having been significantly more casual with them than did female subjects in the OPS group. In addition, HPS subjects were rated by their parents as having seen significantly more approaching and adaptable as infants than did parents of BPS subjects. HPS and OPS subjects were rated as having had a more positive mood and having been more distractible as infants than were the BPS subjects. A discriminant analysis derived two significant functions that distinguished between the groups. The first separated HPS and BPS subjects and was weighted most heavily on negative mood as an infant, a rejecting father, nondistractibility as an infant, and low attention from the mother. The second function distinguished OPS subjects from HPS and BPS subjects and was weighted most heavily on negative mood as an infant, a casual mother, persistent behavior as an infant,

approaching behavior as an infant, and a loving father. These findings should be considered tentative and exploratory, due to the lack of prior empirical research focus. However, they nevertheless suggest multiple influences on development into these styles and suggest routes for future studies.

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APPENDIX A

HYSTERICAL PERSONALITY CHARACTERISTICS*

CHARACTERISTIC	AMONG 22 AUTHORS AGREED ON BY	AMONG 22 AUTHORS AGREED ON BY
Histrionic Behavior	15	12
Emotional Lability	12	10
Dependency	12	10
Excitability	11	10
Egocentrism	11	11
Seductiveness	9	8
Suggestibility	9	8
Childishness	7	4

*Adapted from Alarcon (1973).

APPENDIX B

SCORE DIRECTIONALITY

<u>MEASURE</u>	<u>LOW SCORE</u>	<u>HIGH SCORE</u>
LKTS-Hysterical	Less Hysterical	More Hysterical
LKTS-Obsessive	Less Obsessive	More Obsessive
MMCI-Histrionic	Less Histrionic	More Histrionic
MMCI-Compulsive	Less Compulsive	More Compulsive
STAI A-Trait	Less Anxiety Prone	More Anxiety Prone
Family Density	Longer Intervals Between Children and/or Less Children	Shorter Intervals Between Children and/or Many Children
ITQ		
Activity	Low Activity Level	High Activity Level
Rhythmicity	Rhythmic	Arrhythmic
Approach/Withdrawal	Approaching	Withdrawing
Adaptability	Adapting	Nonadapting
Intensity	Mild	Intense
Mood	Positive	Negative
Persistence	Persistent	Nonpersistent
Distractibility	Distractible	Nondistractible
Threshold	High Threshold	Low Threshold
PCR-II		
Loving-Rejecting	Rejecting	Loving
Casual-Demanding	Demanding	Casual
Attention	Less Attention	More Attention

APPENDIX C

SAMPLE LKTS ITEMS

<u>TRAIT</u>	<u>ITEMS</u>
Aggression	15. I am apt to express my irritation rather than hold it back. 45. If I come across a domineering person, I am inclined to put him in his place.
Oral Aggression	52. I tend to make biting or sarcastic remarks when I criticize other people. 95. I am fond of arguing.
Emotionality	48. I am considered somewhat excitable by my friends. 63. I am rather sensitive, impressionable, and easily stirred.
Exhibitionism	18. I often dramatize a story which I am telling and demonstrate exactly how everything happened. 64. I feel pleasantly exhilarated when all eyes are upon me.
Sexual Provocativeness	30. I have enjoyed flirting. 43. I have been a "tease."
Egocentricity	90. I easily become wrapped up in my own interests and forget the existence of others. 128. I try to get my own way regardless of opposition.
Orderliness	53. I usually get through my work efficiently without wasting time. 67. I organize my daily activities so that there is little confusion.
Severe Superego	103. I carry a strict conscience with me wherever I go. 126. I think that I have a more rigorous standard of right and wrong than most people.

TRAITITEMS

Perseverance

10. I can work at a difficult task for a long time without getting tired of it.
40. I can stand very long periods of exertion.

Rigidity

42. I am usually consistent in my behavior; go about my work in the same way, frequent the same routes, etc.
114. I am a creature of habit. I can even endure monotony without fretting.

Parsimony

69. I believe in "saving for a rainy day."
98. I cherish the possessions that I have.

APPENDIX D

SAMPLE ITQ ITEMS

TEMPERAMENTITEM

Activity

4. The infant sits still while watching TV or other nearby activity.
51. The infant moves about much during feedings (squirms, kicks, grabs).

Rhythmicity

13. The infant wants and takes milk feedings at about the same times (within one hour) from day to day.
46. The infant wants daytime naps at differing times (over 1 hour difference) from day to day.

Approach/Withdrawal

45. The infant's initial reaction at home to approach by strangers is acceptance.
91. The infant's first reaction to any new procedure (first haircut, new medicine, etc.) is objection.

Adaptability

9. The infant accepts his/her bath any time of the day without resisting it.
78. The infant is still wary or frightened of strangers after 15 minutes.

Intensity

18. The infant vigorously resists additional food or milk when full (spits out, clamps mouth closed, bats at spoon, etc.)
75. The infant reacts mildly to meeting familiar people (quiet smiles or no response).

Mood

2. The infant is fussy on waking up and going to sleep (frowns, cries).
61. The infant is content (smiles, coos) during interruptions of milk or solid feeding.

TEMPERAMENTITEM

Persistence

8. The infant plays continuously for more than 10 min. at a time with a favorite toy.
88. The infant pays attention to game with parent for only a minute or so.

Distractibility

21. The infant stops play and watches when someone walks by.
68. The infant continues to reject disliked food or medicine in spite of parents' efforts to distract with games or tricks.

Threshold

22. The infant ignores voices or other ordinary sounds when playing with a favorite toy.
52. The infant reacts (stares or startles) to sudden changes in lighting (flash bulbs, turning on light).

APPENDIX E

DESCRIPTION OF PCR II CATEGORIES*

Loving

Parents were warm, affectionate, and helpful; respected their child's point of view and encouraged him to express it; made him feel wanted and important; reasoned with him and explained harmful consequences when he did wrong things; helped their child to live comfortably with himself, and made it easy for him to confide in them.

Rejecting

Parents were too busy to answer questions; did not spend any more time with their child than they had to; did not take him into consideration in making plans; ridiculed and made fun of him; complained about him; paid no attention to him; and did not try to help their child learn things.

Casual

Parents set very few rules for their child; gave him as much freedom as he wanted; let him off easy when he did something wrong; let him stay up as late as he liked; did not object when he was late for meals; was easy with him; did not bother much about enforcing rules.

Demanding

Parents punished their child hard enough when he misbehaved to make sure that he would not do it again; made it clear that they were the bosses; demanded unquestioning respect; punished their child by being more strict about rules and regulations; expected prompt and unquestioning obedience.

Attention

Parents spoiled their child; relaxed rules and regulations as a reward; gave him candy or ice cream as a reward; gave their child special attention as a reward; rewarded him by giving him money or increasing his allowance; gave him new things as a reward, such as toys.

*Adapted from Siegelman & Roe (1979).

APPENDIX F

CONSENT FORM FOR FIRST PHASE OF STUDY

Thank you for your participation in this study. Your cooperation is greatly appreciated.

The current study is an investigation of variables associated with various kinds of people. The study is divided into phases; this initial phase involves filling out and completing the four enclosed questionnaires and the general information requested on the face sheet. If you complete them and return them to me, you will receive one credit hour.

Some of the people who complete the enclosed questionnaires may be requested by the experimenter to come in at a later date to fill out different, additional forms, for which they would receive another credit hour. Although these people would be selected on the basis of their scores, it is extremely important to note that selection would not imply or indicate any sort of psychological "abnormality." Instead, selection might be based on one of two criteria: Either the subject was randomly selected for a Control group or the subject was selected as being representative of a certain kind of person. However, the four enclosed questionnaires deal solely with the initial phase of the study.

Your confidentiality will be maintained at all times. Your questionnaire will be identified only by an identification code. A master list of codes and corresponding names will be maintained by the experimenter during the course of the study and will be accessible only to him. When the data are completely collected, this master list will be destroyed. You are completely free to decide not to participate in this study and may do so without penalty. The experimenter will come into the class at the end of the semester to explain the study in more detail and answer questions.

I would very much appreciate your involvement in what I think will be an interesting experience. If you decide to participate in this study, please sign and date this form below.

Thank you again.

Mark Groberski
Graduate Student in Clinical
Psychology

APPENDIX G

COMPOSITION OF TOTAL SAMPLE ($N = 64$)

<u>Sex</u>	<u>HPS Group</u>	<u>OPS Group</u>	<u>BPS Group</u>
Male	26% ($\underline{n} = 5$)	65% ($\underline{n} = 11$)	39% ($\underline{n} = 11$)
Female	74% ($\underline{n} = 14$)	35% ($\underline{n} = 6$)	61% ($\underline{n} = 17$)
<u>Semester</u>			
Spring	53% ($\underline{n} = 10$)	59% ($\underline{n} = 10$)	68% ($\underline{n} = 19$)
Summer	47% ($\underline{n} = 9$)	41% ($\underline{n} = 7$)	32% ($\underline{n} = 9$)
<u>Class^a</u>			
Freshmen	37% ($\underline{n} = 7$)	24% ($\underline{n} = 4$)	48% ($\underline{n} = 13$)
Sophomores	21% ($\underline{n} = 4$)	47% ($\underline{n} = 8$)	15% ($\underline{n} = 4$)
Juniors	26% ($\underline{n} = 5$)	18% ($\underline{n} = 3$)	30% ($\underline{n} = 8$)
Seniors	16% ($\underline{n} = 3$)	12% ($\underline{n} = 2$)	7% ($\underline{n} = 2$)
<u>Race^a</u>			
White	89% ($\underline{n} = 17$)	88% ($\underline{n} = 15$)	70% ($\underline{n} = 19$)
Hispanic	5% ($\underline{n} = 1$)	12% ($\underline{n} = 2$)	22% ($\underline{n} = 6$)
Oriental	5% ($\underline{n} = 1$)		4% ($\underline{n} = 1$)
Asian			4% ($\underline{n} = 1$)

^aOne piece of information missing in BPS group.

APPENDIX H

MBTI TYPE DISTRIBUTIONS FOR TOTAL SAMPLE (N = 64)

HPS Group (N = 19)

ENFP 37% (n = 7)
 ESFP 16% (n = 3)
 ESFJ 11% (n = 2)
 ENFJ 11% (n = 2)
 INFP 11% (n = 2)
 ENTP 5% (n = 1)
 INFJ 5% (n = 1)
 ISFP 5% (n = 1)

OPS Group (N = 17)

ENTJ 29% (n = 5)
 ESTJ 24% (n = 4)
 ISTJ 18% (n = 3)
 INTJ 12% (n = 2)
 INTP 6% (n = 1)
 ENTP 6% (n = 1)
 ESTP 6% (n = 1)

BPS Group (N = 28)

INFP 21% (n = 6)
 ISFJ 14 (n = 4)
 ESTP 14 (n = 4)
 ESTJ 11 (n = 3)
 ENTP 7 (n = 2)
 ISFP 7 (n = 2)
 INTP 7 (n = 2)
 ISTP 4 (n = 1)
 ESFJ 4 (n = 1)
 ESFP 4 (n = 1)
 ESTJ 4 (n = 1)
 ENTJ 4 (n = 1)

APPENDIX I

MEAN DIFFERENCES OF SUBJECT CHARACTERISTICS

FOR TOTAL SAMPLE (N = 64)

	<u>HPS Group</u>	<u>OPS Group</u>	<u>BPS Group</u>	<u>F</u>
Age ^a	20.53	19.88	20.48	.14
STAI A-Trait	37.47	35.18	41.71	2.56
LKTS				
Hysterical	25.74	15.53	17.07	16.40***
Obsessive	16.37	23.76	15.14	16.53***
MMCI				
Histrionic	22.05	16.82	16.86	11.38***
Compulsive	22.79	29.24	22.82	15.44***

^aOne missing value.***p < .001

APPENDIX J

CONSENT FORM FOR SECOND PHASE OF STUDY

The current study is an investigation of variables associated with various kinds of people. During today's session, you will be asked to supply information regarding your gender, your siblings' gender, your birthdate, and your siblings' birthdates. In addition, you will be asked to complete two questionnaires dealing with your relations with your parents while you were growing up. One of these questionnaires deals with your relations with your mother and the other deals with your relations with your father. If you decide to supply the above information, you will receive one credit hour.

You will also be requested to participate in the second part of this study. This would involve taking home a questionnaire for the parent who was your primary caretaker during your first year of life to complete. If this questionnaire is completed by that parent and returned to the experimenter, you will receive a second credit hour.

Your confidentiality will be maintained at all times. Your questionnaire data will be identified only by an identification code. A master list will be maintained by the experimenter during the course of the study and will be accessible only to him. When the data are completely collected, this master list will be destroyed.

You may at this time request any clarification or ask any questions. You are free to withdraw from this study at any time without penalty.

Thank you very much. Your participation will be greatly appreciated.

Mark Groberski
Graduate Student in Clinical
Psychology

Subject

Date

APPENDIX K

LETTER TO PARENT

Dear Parent:

Your son or daughter is currently enrolled in an Introductory Psychology course at Loyola University of Chicago. Students in this class are requested to participate in a certain number of hours of psychological research, as a research subject, during the course. The number of hours in which they are involved with such research counts for extra points on their final course grade. In addition to the obvious benefit to the researchers in the Psychology Department, it is felt that the student's involvement in the research process as a subject enhances the knowledge he or she acquires in class.

Your son or daughter recently participated in a study I am conducting in order to obtain my Master's degree in clinical psychology. The study involves factors associated with various kinds of people. One of the factors I am interested in is children's early temperament. Enclosed is a questionnaire to be completed by the parent who had primary responsibility for your son or daughter during his or her first year of life. I wish to ask that parent to think back to what your son or daughter was like during his or her first year of life and to use those memories in responding to the questionnaire. If the questionnaire is returned to me, either by using the addressed and stamped envelope I have provided or by your son or daughter hand-delivering it, the student will receive one credit hour for one hour of research participation.

Please read through the consent form included with the questionnaire. If you decide to complete the questionnaire and return it to me, please sign and date the consent form, have a witness also sign it, and then complete the questionnaire and the "General Information" sheet. The questionnaire, the consent form, and the "General Information" sheet should all be returned to me no later than April 27, 1982.

Your cooperation will be greatly appreciated. Thank you very much.

Yours very truly,

Mark Groberski
Graduate Student in Clinical
Psychology

APPENDIX L

PARENT'S CONSENT FORM

The current study involves factors associated with various kinds of people. One of the factors being investigated is children's early temperament. You are requested to complete a questionnaire regarding your son or daughter's early temperament. If this questionnaire is completed and returned to the researcher, along with the "General Information" sheet and this consent form, your son or daughter will receive one credit for one hour of research participation.

The student's confidentiality will be maintained at all times. Questionnaire data is identified only by an identification code. A master list of codes and corresponding names will be maintained by the researcher during the course of the study and will be accessible only to him. When the data are completely collected, this master list will be destroyed.

You are completely free to refuse to participate in this study. There will be no penalty for your son or daughter should you decide not to participate.

Your involvement in this research would be greatly appreciated. Thank you very much.

Parent

Witness

Date

APPENDIX M

MEAN DIFFERENCES OF SUBJECT CHARACTERISTICS
FOR SUBSAMPLE SUBJECTS WITH COMPLETE DATA SETS (N = 43)

	<u>HPS Group</u>	<u>OPS Group</u>	<u>BPS Group</u>	<u>F</u>
Age ^a	19.69	20.25	20.88	.342
STAI A-Trait	37.77	35.08	42.67	.49
LKTS				
Hysterical	26.85	14.75	17.33	12.60***
Obsessive	15.38	23.50	14.56	11.21***
MMCI				
Histrionic	22.31	16.00	17.00	8.92***
Compulsive	22.38	29.92	23.33	11.90***

^aOne missing value.

***p < .001

APPROVAL SHEET

The thesis submitted by Mark Joseph Groberski has been read and approved by the following committee:

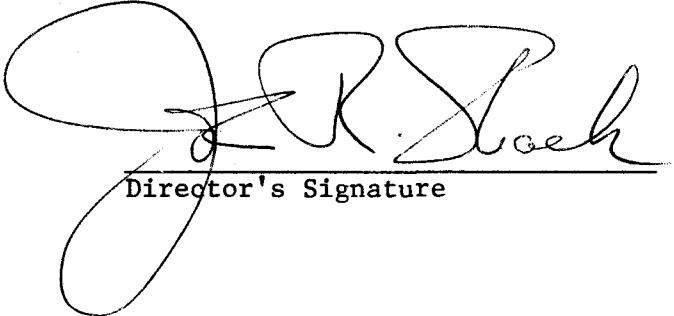
Dr. John R. Shack, Director
Associate Professor, Psychology, Loyola

Dr. Dan P. McAdams
Assistant Professor, Psychology, Loyola

The final copies have been examined by the director of the thesis and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the thesis is now given final approval by the Committee with reference to content and form.

The thesis is therefore accepted in partial fulfillment of the requirements for the degree of Master of Arts.

3/7/84
Date


Director's Signature