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Personality Styles in Affective Disorder: Trait Components of a State Disorder

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Personality Styles in Affective Disorders:
Trait Components of a State Disorder

by

Gene E. Alexander

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
Master of Arts

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VITA

The author, Gene Evans Alexander, is the son of Paul Davis Alexander and Joyce (Block) Alexander. He was born December 1, 1961, in Bronx, New York.

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INTRODUCTION

Our understanding of the nature and origins of affective disorders has greatly expanded over the last 50 years. With the development of reliable and valid affective measures and the DSM-III diagnostic criteria, the types of questions asked in depression research have been more rigorously addressed. This research, however, has been far from conclusive in explaining the etiology of clinical depression. Although affective disorders have generally been recognized and measured in terms of their state symptoms and behavioral manifestations, the effect of longstanding personality traits on these disorders has been an important area of study.

The majority of the literature on affective disorders has been devoted to categorizing, assessing, and treating the mood and behavioral symptoms typically associated with depressive illness. A considerable amount of research has been directed at the question of how personality traits interact with these state symptoms. Several theorists from a broad range of theoretical perspectives have suggested the existence of premorbid personality characteristics which may predispose an individual to specific affective disorders. However, the study of trait components of

clinical depression has been difficult due to the lack of stable and reliable measures of relevant personality characteristics.

Millon (1983) has developed a personality measure, the Millon Clinical Multiaxial Inventory (MCMI), whose personality scales have been shown to be reliable and stable as measures of personality styles (McMahon, Flynn, & Davidson, 1985; Millon, 1983). These scales were developed to be consistent with the diagnostic categories for personality disorders in DSM-III. It is felt that the personality scales of the MCMI can provide a clinically meaningful measure of the personality components in clinical depression. In addition, Millon (1981) has theorized a relationship between the personality scales and clinical depression, suggesting that certain personality styles are more likely to coincide with specific affective disorders.

The present study is an attempt to examine the personality styles present in affective disorders. The differences in personality styles, as measured by the MCMI, will be compared for manic-depressed (bipolar), depressed (unipolar), and normal subjects. Millon's theorized relationships between specific scales and clinically depressed groups as well as the stability

personality styles across different mood states will be tested.

Personality Traits and Clinical Depression

A great deal of theoretical and empirical study has been devoted to identifying individuals who are prone to develop an affective disorder. Yet there is clearly no consensus in the literature concerning the personality features which are present in individuals with a depressive or manic-depressive illness (Millon & Kotik, 1985). Several researchers have indicated the inherent difficulties in conducting this type of research (Chodoff, 1972; Paykel & Weissman, 1973):

The accurate assessment and classification of both depression and personality are difficult enough themselves without having also to tease out the effects of depression on personality functions, or the impact of premorbid personality on the symptomatic expression of depression. (Millon & Kotik, 1985, p. 700)

The most commonly theorized relationship between personality and depression suggests that relevant personality traits temporally precede the onset of depressive disorders. Thus, personality has been viewed primarily as an etiological component of depression which may determine the type of symptoms experienced with specific affective disorders (Klerman, 1973). Researchers from a wide variety of theoretical

orientations have tried to address this question. The etiological view of personality as a predisposing factor of clinical depression has received its strongest support from psychoanalytic theorists.

The psychoanalytic viewpoint emphasizes an individual's developmental history and early family interactions as important factors in predisposing them to depressive illness. The classical psychoanalytic view of depression, first espoused by Abraham in 1911, focused on the person's experience of aggression, derived from unmet needs, which is turned inward to produce the depressive disorders (Wetzel, 1984). This theory has been reformulated by Freud and later theorists to emphasize the experience of object loss or "the separation from significant objects of attachment" (Whybrow, Akiskal, & McKinney, 1984, p. 34) as the primary intrapsychic factor leading to depression. Thus, it is theorized that early life experiences of object loss will produce a personality structure which is predisposed to depression. The nature of this depressive personality structure has been addressed most thoroughly by Jacobson, who has presented an in-depth theoretical account of depression through describing a personality organization based on the frustration of dependency needs and narcissism (Wetzel, 1984). This

theory views depression as a disorder of self-esteem which "represents the degree of discrepancy between the self-representations [or internalized view of the self] and the wished-for" or ideal self-concept (Mendelson, 1974, p. 74).

The concepts of dependency and narcissism are pervasively related to ego functioning and self-esteem throughout the psychoanalytic literature (Birtchnell, 1984). According to Jacobson (1971) and other psychoanalytic theorists, the quality of early social and interpersonal attachments to caretakers or significant others will strongly influence a person's later values, feelings, and behaviors concerning intimacy, interdependency, and friendships. Additionally, it has been theorized that at the core of the depressive personality structure is a narcissistic disturbance derived from a "fragile self", in which a narcissistic self-image is used as a defense against feelings of worthlessness and inadequacy (Mollon & Parry, 1984).

Blatt (1974) has conducted a review of the psychoanalytic depression literature and suggests that impairments at each level of a person's development of object relations can lead to a vulnerability to depression. Further, he has described two subtypes of

depression: anaclitic and introjective. The "anaclitic depressive is characterized by feelings of helplessness, depletion, and weakness with a fear of abandonment and a need to maintain close contact with a need gratifying object" (Wetzel, 1984, p. 30). Introjective depression, however, stems from a higher level of ego functioning and is characterized by ambivalent feelings of love and hate towards authority figures; and a need to achieve combined with feelings of worthlessness, inferiority, and failure in living up to expectations (Wetzel, 1984). Blatt, D'Afflitti, and Quinlan (1976) have provided some empirical support for these two subtypes of depression with the development of a measure assessing object relations in depressed patients. The anaclitic and introjective subtypes were further supported by Blatt, Quinlan, Chevron, McDonald, and Zaroff (1982), where clinical judges were able to successfully predict the type of depression based on case records of psychiatric patients.

Thus, according to the psychoanalytic depression literature, it appears that personality structures organized around object loss, dependency needs, narcissistic disturbances, and devalued self-esteem have been viewed as the primary intrapsychic predispositional factors leading to depression. Although researchers

such as Blatt are beginning to address the theory from a more rigorous and empirical standpoint, the need for further study is clearly indicated.

Several cognitive theorists have made important contributions to the depression and personality literature. Beck (1974) has theorized that depression is primarily a result of a person's tendency to view the self, the future, and the world in a unrealistic and negative manner. This cognitive theory suggests that individuals are prone to depression when they distort reality through the use of schemata (cognitive patterns through which we process events) which are "global, rigid, and negatively toned" (Sacco & Beck, 1985, p. 4). Beck describes his theory as a diathesis-stress model in which depression-prone individuals acquire negative self-schemata through early experiences that serve to shape their distorted cognitive set (Sacco & Beck, 1985). These schemata, however, remain latent until some stressful precipitating event occurs.

Beck has extended his cognitive theory to include the consideration of personality attributes which may lead to depression. He has proposed two personality types which are predisposed to develop depression: autonomous and socially-dependent. The autonomous personality type refers to individuals who feel a sense

of defeat and failure while "blaming [themselves] continually for falling below [their] standards (self-attribution) and excoriating [themselves] for [their] incompetence (self-punishment)" (Beck, 1981, p. 276). The socially-dependent type describes an individual who depends on others for safety, help, and gratification; and is characterized by being passively receptive in social interactions (Sacco & Beck, 1985). Depression usually develops in these individuals as a result of experiencing interpersonal rejection or loss. Although these personality attributes have not been directly examined through empirical study, Beck's overall cognitive theory has received strong empirical support from studies examining both the theory and its effectiveness in the treatment of depression (Sacco & Beck, 1985).

Another important cognitive theory of depression is derived from Seligman's (1975) behavioral study of learned helplessness. His original theory suggested that depression is a state of learned helplessness characterized by a person's perception of lack of control over the environment. This theory was reformulated into a cognitively-based attributional theory which proposes that depression is related to the causal attributions a person makes to account for

uncontrollable and negative life events (Abramson, Seligman, & Teasdale, 1978). More specifically, the reformulation states "that individuals who have an explanatory style that invokes internal, stable, and global causes for bad events tend to become depressed when bad events occur" (Peterson & Seligman, 1984, p. 347). Thus, when an individual assumes personal responsibility for negative life events, and believes that these experiences will continue to occur in all areas of his/her life, then he/she is likely to feel helpless and of low self-esteem, and will be predisposed to depression.

This depressive attributional style has been the focus of a great deal of empirical study. Some support for the attributional model has been shown (Seligman, Abramson, Semmel, & von Bayer, 1979; Peterson, Schwartz, & Seligman, 1981; Peterson & Seligman, 1984). However, most studies examining this theory have been conducted in laboratory settings or are correlational in nature using normal populations (i.e., college students). Studies using clinically depressed patients and real life events have not provided strong evidence in support of the attributional model (Coyne & Gotlib, 1983).

In summary, although the psychoanalytic and cognitive theories approach depression and personality from very different points of view, namely affect versus cognition, there seems to be some convergence in the types of personality traits which may predispose an individual to depression. Both sets of theories have suggested that overly dependent individuals who tend to feel helpless, worthless, abandoned, and rejected in social relationships while blaming themselves for their perceived inadequacy are likely to develop depression.

A subtype of affective disorders which has not been specifically addressed thus far is the manic-depressive or bipolar disorder. The personalities of manic-depressives were first described by Kraepelin as Cyclothymic or Cycloid, which refers to the patients' display of mood swings (Chodoff, 1972). Manic-depressive patients have been described as emotionally unstable or labile, as their mood shifts from periods of extreme optimism to periods of gloom and despair (Winokur, Clayton, & Reich, 1969). Most studies examining the relationship between personality and affective illness have focused on unipolar depression without attending to the personality components of the bipolar disorder (Hirschfeld, 1986). The majority of

studies which have addressed the personality traits of bipolar patients have examined neurophysiological and biological aspects of the illness, looking for physiological correlates of personality in affective disorders (Agren, 1983; Perris, von Knorring, Perris, & Eisemann, 1983; Sedvall, 1981). However, these studies have generally not shown consistent and stable relationships between the biological markers being studied (i.e., blood platelets and MAO transmission) and the personality and behavioral features of depression (Asberg, Martensson, & Wagner, 1986).

A number of studies have directly compared the personalities of unipolar and bipolar patients using a variety of psychometric trait measures. Bech, Shapiro, Sihm, Nielsen, Sorensen, and Rafaelsen (1980) studied unipolar and bipolar patients while in a neutral mood. Personality traits were measured by the Eysenck Personality Inventory, Marke-Nyman Temperament Scale, Zerssen Personality Scale and Cesarec-Marke Personality Scale. These measures assess a wide variety of traits including extraversion, neuroticism, psychoticism, melancholia, cyclothymia, obsessionality, hysteroidy, guilt feelings, autonomy, achievement, and succorance. The authors found the two groups to be more similar than different, with the unipolars scoring significantly

lower than the bipolars only on measures of guilt feelings, autonomy, and succorance. This study, however, is severely limited by the lack of a normal control group and no consideration for the effects of gender or race on the personality measures.

In a study by Hirschfeld (1986), the personalities of recovered bipolar and unipolar women were compared on measures of extraversion, neuroticism, interpersonal dependency, and oral, obsessive, and hysterical psychoanalytic personality patterns. Again the unipolar and bipolar groups were shown to be more similar than different in personality, with no significant differences found between the two groups. A non-significant trend was, however, indicated for the bipolars in scoring higher on extraversion than the unipolar group.

Matussek and Feil (1983) compared the personality traits of unipolar, bipolar, neurotic, and normal subjects while the affective disordered patients were in a depression-free period. Demographic factors, such as age and gender were controlled. Personality traits were measured by 16 scales derived from measures similar to those used in the Bech et al. (1980) study. In this case, the groups were found to differ significantly from each other, with the unipolars showing a greater lack of

autonomy and the bipolars showing higher levels of aggressivity and drive for achievement. From these results, the authors describe unipolar patients as having personality features characterized by dependency, overadaptivity, passivity, and the avoidance of responsibility. Bipolar patients are viewed as having attributes of orderliness, achievement motivation, and subordination to authority. Although this study was carefully designed, the authors did not appear to control for the potential effect of a manic state on the personality measurement. The affective disordered groups were assessed to be in a depression-free state. However, they were not necessarily euthymic (neither depressed nor manic), as the manic symptoms of the bipolar disorders were not assessed.

The effect of mood state on trait measurement has been shown to be an important consideration. A study by Hirschfeld, Klerman, Clayton, Keller, McDonald-Scott, and Larkin (1983) examined the personality patterns of affective disordered patients during intake evaluations and again during a one year follow-up. The patients were divided into those who recovered after one year and those who did not. Personality traits were measured on 19 scales which assessed the characteristics of emotional strength, interpersonal dependency, and

extraversion. The findings indicated that clinically depressed states strongly influence scores on these three personality constellations. Both sexes, on recovery, showed lower levels of neuroticism, dependency, and lack of social confidence, and higher levels of emotional stability and objectivity. Only the women in this group showed increased levels of extraversion and sociability. These findings support the need to measure personality patterns while patients are in a symptom-free (euthymic) state. However, this study is limited in that it does not consider the personality traits of the unipolar and bipolar patients separately.

Millon's Theory of Personality and Depression

Millon (1969, 1981) has presented a theory of psychopathology which is based on a continuum of personality functioning. This theory is organized according to a two dimensional matrix which produces eight personality styles, each corresponding to a DSM-III (1980) personality disorder category. The first dimension of Millon's personality matrix is concerned with an individual's primary source of positive reinforcement. This dimension consists of four sources, each indicating a distinct style or preference for gaining positive reinforcement. The first source

describes the person who experiences very few rewards or reinforcements (detached); the second refers to those who derive their reinforcement from others (dependent); the third describes those individuals who gain reinforcement from themselves without referring to others (independent); and the fourth source refers to those who experience a conflict between gaining their reinforcements from themselves and reacting to the expectations of others (ambivalent) (Millon, 1981).

The second dimension of the matrix is concerned with an individual's basic pattern of behavior used for coping with or reacting to the environment. This dimension consists of two behavior types: the active pattern, which describes those individuals who tend to be aroused, attentive, and engaged with the environment by interacting with and exerting some control over life events; and the passive pattern, which describes those who display an apathetic and yielding approach to the environment with no interest in exerting control over life events (Millon, 1981). In the structure of Millon's personality matrix, the two dimensions or sets of behavioral preferences interact to form eight basic personality styles: schizoid (passive-detached), dependent (passive-dependent), narcissistic (passive-independent), compulsive (passive-ambivalent), avoidant

(active-detached), histrionic (active-dependent), antisocial (active-independent), and passive-aggressive (active-ambivalent).

Millon (1981) describes psychopathology as an extreme deviation from one's basic personality style. These deviations can occur as a result of distorted or deteriorated personality functioning, which produces serious and longstanding psychopathology; or as a result of the presence of more transitory clinical syndromes produced in response to stressful life events. This latter case refers to the DSM-III Axis I disorders, while the former refers to either an intensification of the basic personality styles or to three additional personality disorder categories: Schizotypal, Borderline, and Paranoid. Millon (1981) has suggested that with a severe disturbance of the basic personality styles, one of these additional pathological personality styles may develop.

From this theoretical base, Millon (1983) has developed a measure, the Millon Clinical Multiaxial Inventory (MCMI), which was designed to assess basic and pathological personality styles, as well as, more transitory clinical syndromes. Each basic personality style is represented by a separate scale on the MCMI. The schizoid personality style characterizes an

individual who appears lethargic and fatigued, interpersonally aloof, intellectually impoverished with obscure thought processes, emotionally flat or impassive, and overly objective or impersonal. The avoidant personality is typically guarded in relating to the environment, experiences social anxiety, avoids interpersonal contact while seeking acceptance, appears distracted by disturbing internal thoughts, shows emotional confusion and sadness, and uses fantasy for need gratification. The dependent personality tends to withdraw from responsibility, feels helpless and submissive, shows a naive and gullible cognitive style, tends to avoid social conflict, and forms strong clinging attachments to others. The histrionic personality style tends to be over reactive and impulsive, seeks attention from others, avoids introspection, displays dramatic and superficial emotions, and tends to use dissociation as a defense against self-reflection. The narcissistic personality style is characterized by an arrogant and exploitive approach to others, an expansive and unrealistic cognitive style, a cool emotional appearance which can turn to rage, and a tendency to use rationalization to justify self-centered behavior. The antisocial personality describes an individual who tends to be

attracted to dangerous and risky situations, lacks a capacity for sentiment or compassion for others, and tends to be hostile and aggressive while acting out without remorse. The compulsive personality style describes a disciplined and perfectionistic individual who tends to adhere to social expectations, shows a constricted and unimaginative cognitive style, restrains emotions, and uses reaction formation as a defense against unacceptable inner feelings. The passive-aggressive personality type refers to a person who tends to stubbornly resist the expectations of others, exhibits conflicting behaviors in social relationships, appears cognitively inconsistent, tends to feel irritable, and uses displacement to release negative emotions indirectly (Millon, 1984).

Research testing Millon's theory of psychopathology and personality, through the use of the MCMI, has been limited; and some questions have been raised concerning the MCMI's ability to measure DSM-III disorders (Widiger, Williams, Spitzer, & Frances, 1985). However, Millon (1983, 1985) has found the MCMI to be generally effective in classifying psychiatric patients according to DSM-III diagnostic categories. In addition, several studies have used the basic personality scales to examine the personality

configurations associated with specific clinical syndromes or state disorders (Robert, Ryan, McEntyre, McFarland, & Lips, 1985; McMahon & Davidson, 1985).

Millon has, specifically, discussed the relationship between these basic personality styles and affective disorders. In contrast to the etiological view of personality in depressive illness, Millon supports a pathoplastic relationship between personality styles and depressive disorders (Millon & Kotik, 1985). From this perspective, it is suggested that personality serves to shape the expression of the specific affective symptoms associated with clinical depression. Thus, the symptoms of depression may serve a very different purpose (secondary gain) for a given individual, depending on their premorbid personality style. In addition, Millon (1981) has suggested that certain personality styles are more likely to coincide with specific affective disorders. He theorizes that the avoidant, dependent, and passive-aggressive styles are more likely to be present for individuals with depressive (unipolar) disorders, while narcissistic and histrionic styles are more likely for manic-depressive (bipolar) patients.

Some support for the relationship between these personality styles and depressive and manic

symptomatology has been shown in a study by McMahon and Davidson (1985). In this study, correlations between the MCMI personality scales and the six Profile of Mood State (POMS) scales were found for a group of inpatient alcoholics. The Avoidant, Dependent, and Passive-Aggressive personality scales were moderately correlated with the Depression scale of the POMS. The Histrionic and Narcissistic personality scales were significantly correlated with the Vigor-Activity scale of the POMS. Although this study does not show strong and clear support for the association between the personality scales and affective disorders, it does demonstrate a relationship between the expected personality scales and the symptom or mood patterns of an alcoholic population. A more direct study examining the personality styles present in affective disorders using clinically depressed populations seems warranted.

Hypotheses

In this study, the trait differences between bipolar, unipolar, and normal subjects were examined using the basic personality scales of the MCMI. To control the effect of mood state on trait measurement, the personality style differences between diagnostic groups were compared only for subjects in the euthymic mood. It was predicted that these subjects, who are

neither depressed nor manic at the time of testing, will present personality characteristics on the MCMI which are not affected by mood symptoms and thus, are more indicative of their underlying personality styles.

Hypothesis 1: It is predicted that the personality style configurations on the MCMI for the bipolar euthymic, unipolar euthymic, and normal groups differ significantly.

Specific scale differences will also be examined between the diagnostic groups in the euthymic mood. Millon (1981) has suggested that several basic personality styles are more likely to occur with specific affective disorders. He has indicated that histrionic and narcissistic styles tend to coincide with bipolar affective disorders, while the avoidant, dependent, and passive-aggressive styles are more likely to occur in unipolar depressive disorders. Some support for these predictions have been shown in correlational studies (Millon, 1983; McMahon & Davidson, 1985). The present study will examine these predicted scale relationships in a between groups design.

Hypothesis 2: It is hypothesized that, according to the theoretical expectations of Millon, mean base rate scores for the Histrionic and Narcissistic scales are

significantly greater for the bipolar euthymic group compared to the unipolar euthymic and normal groups.

Hypothesis 3: Accordingly, it is hypothesized that the mean base rate scores for the Avoidant, Dependent, and Passive-Aggressive scales are significantly greater for the unipolar euthymic group compared to the bipolar euthymic and normal groups.

It is also of interest to examine the effect of mood state on longstanding personality characteristics. By definition, trait characteristics refer to relatively stable and enduring personality features which, theoretically, should not be severely altered by episodic changes in mood state. However, Hirschfeld et al. (1983) has found the trait measurement of depressed patients to be influenced by mood state changes. Although Millon (1983) has indicated a relationship between personality and symptom scales on the MCMI through item overlap and intercorrelation, it is not clear the degree to which personality styles of affective disorders would be affected by the presence of mood states such as mania or depression.

Hypothesis 4: If bipolar and unipolar personality styles represent longstanding characteristics which are separate from the acute and episodic symptoms of these

affective disorders, then it is expected that there should be no significant differences in personality style configurations between mood states (manic, depressed, or euthymic) within the bipolar and unipolar groups.

METHOD

Subjects

Subjects in this study were 303 adults whose ages ranged from 18 to 78 (\underline{M} = 40.00, \underline{SD} = 12.93). This group was predominantly white (89.1%, 8.9% black, 2.0% Hispanic or Asian) and consisted of 146 males and 157 females. Subjects in the affective disorder groups (\underline{n} = 255) were obtained from a clinical population of 391 psychiatric patients, who were referred for psychiatric evaluation at an out-patient affective disorder evaluation unit. These individuals were diagnosed with an affective disorder according to DSM-III criteria. Subjects for the normal comparison group (\underline{n} = 48) were obtained from a pool of 111 adult participants in an out-patient screening program for medical illness. These individuals did not carry a psychiatric diagnosis. The test results and diagnostic information for all subjects were collected over a five year period as part of an affective disorder project in association with V.A. Lakeside Medical Center. The subjects agreed to have the information collected made available for research purposes.

Materials

Millon Clinical Multiaxial Inventory (MCMI):

The MCMI is a self-report inventory designed specifically for diagnostic screening and clinical assessment providing scores on twenty clinical scales and two validity scales. The clinical scales are organized into three categories measuring "persistent personality features, current symptom states, and levels of pathological severity" (Millon, 1983, p. 3).

This measure consists of 175 statements, to which patients' respond true or false, indicating whether they agree or disagree with each statement. Each scale raw score is converted to Base Rate Scores (BRS) which are derived from data indicating the prevalence of personality and symptom disorders in the population. Base rate cut-off scores are used to indicate the optimal correct diagnostic classification, which produce the most valid-positive and least false-positive classifications. A BRS of 75 indicates that the respondent shows the presence of personality or symptom features for a given scale, while a BRS of 85 indicates the presence of a personality or symptom syndrome.

The first eight scales of the MCMI are the Basic Personality Scales which assess the more enduring traits associated with premorbid characterological patterns of

behavior, interpersonal relating, and cognitive and emotive functioning. The next three scales, the Pathological Personality Scales, assess the presence of chronic and severe psychopathology related to the patients' overall personality structure. The remaining nine clinical scales are designed to measure the presence of symptom disorders of a reactive nature which are characterized by a short duration.

Acceptable test-retest reliability coefficients have been reported for each of the 20 clinical scales (Millon, 1983; McMahon et al., 1985). The Basic Personality Scales were the most stable over time with coefficients in the .80 range. The pathological personality scale coefficients averaged in the high .70 range, while the symptom scales showed generally lower reliability coefficients in the middle .60 range. Millon (1983) has also demonstrated acceptable concurrent validity for each scale through significant correlations between the MCMI and relevant scales from the MMPI and SCL-90.

Hamilton Rating Scale for Depression (HRSD):

The HRSD is an observer rating scale which is designed to systematically quantify the results of clinical interviews with depressed patients. Although several versions of the HRSD have been developed, each

form of this measure is concerned with rating the severity of a number of depression symptom variables. In this study, the Early Clinical Drug Evaluation Unit (ECDEU) version was used (see Appendix). This form was developed by the National Institute of Mental Health research program and consists of 24 items, addressing a variety of symptoms of depression. Each item is rated by the interviewer according to the severity of the symptoms present. Only 17 of the 24 items were used in completing the overall depression scores. This scoring procedure is the most commonly used, and is consistent with the original HRSD scoring system (Hamilton, 1967).

Scores on the HRSD can range from 0 to 50. A score of 6 or below represents non-depressed functioning. Scores of 7-17 are indicative of mild depression, 18-24 of moderate depression, and scores of 25 or greater of severe depression. Although cut-off scores used to discriminate depressed groups have varied in the literature, a score of 17 has often been used as the criterion score in separating depressed from non-depressed patients in drug outcome studies (Shaw, Vallis & McCabe, 1985).

The HRSD has demonstrated high inter-rater agreements for total scores (Hedlund & Vieweg, 1979). Inter-rater reliability coefficients have ranged from

.84 to .96, when administered by trained clinicians (Hamilton, 1986). In addition, correlations between the individual HRSD items and the total score have been reported with a range of .45 to .78 (Schwab, Bialow & Holzer, 1967). However, Bech, Bolwig, Kramp and Rafaelsen (1979) have reported item-total correlations ranging from $-.02$ to $.87$. These findings demonstrate only moderate internal consistency for the items of the HRSD. This moderate level of homogeneity within the scale has not been viewed as a serious fault given this measure's attempt to assess a wide range of depressive symptomatology.

Acceptable concurrent validity of the HRSD has also been demonstrated in the literature (Hedlund & Vieweg, 1979). Studies have shown that the HRSD can differentiate depressed individuals from both normals and non-depressed psychiatric patients (Hedlund & Vieweg, 1979). In addition, the rating scale scores are related to clinicians' global mood ratings and moderately related to depression measures such as the Beck Depression Inventory and the MMPI D Scale (Median correlations of $.58$ and $.44$, respectively). Studies using global mood ratings and other depression measures have shown the HRSD to be a scale which is very

sensitive to changes in the severity of depression (Shaw, Vallis, & McCabe, 1985).

Mania Rating Scale (MRS):

The MRS, developed by Young, Biggs, Ziegler, & Meyer (1978, see Appendix), is an observer rating scale designed to be administered by clinicians in the context of a clinical interview. It was developed as a scale to allow the clinician to quantify the severity of manic symptoms associated with bipolar affective disorders. The MRS consists of 11 items representing manic symptom variables, each with five clearly defined levels of severity. The total mania score can range from 0 to 44. This measure was constructed to follow the style of the Hamilton Rating Scale for Depression and although it has not received extensive study, it has shown comparable reliability, validity, and sensitivity as a rating scale measuring the severity of manic symptoms (Shopsin, 1979).

The authors of the MRS have found an inter-rater reliability of .93 and inter-rater agreements for item scores ranging from .66 to .92 (Young, et al., 1978). An examination of concurrent validity has shown the MRS to correlate highly with global mood ratings (.77) and established mania rating scales, the Petterson Scale, .89 and the Biegel Scale, .71 (Young, et al., 1978).

Cut-off scores for separating manic groups have not been established in the literature. However, the authors of the MRS have found their scale to be effective in differentiating the severity of manic mood group based on clinicians' global ratings. In this case, the euthymic groups had a median MRS score of 12.5, while the mildly manic, manic, and severely manic groups had median MRS scores of 19.3, 25.5, and 37.9, respectively (Young, et al., 1978).

Global Mood Ratings:

The global mood rating is a single item global rating of mood state using a seven point scale (see Appendix). The rating for each patient represents the interviewing clinicians' overall impression of their mood state at the time of the interview. The rating scale covers the full range of affective mood states, indicating manic, hypomanic, euthymic, mildly depressed, depressed, severely depressed, and mixed affective states. Although inter-rater reliability was not available for this sample, global mood ratings have, generally, been found to be reasonably reliable among trained clinicians (Paykel & Norton, 1986). For example, an eight point global rating assessing manic mood states produced an inter-rater reliability of .77 for a group of 35 psychiatric patients (Young, et al.,

1978). In addition, global mood ratings are viewed as having good face validity and have demonstrated acceptable concurrent validity with moderate to high correlations with mood rating scales such as the HRSD and MRS (Paykel & Norton, 1986).

Procedure

As a part of their psychiatric evaluation, the subjects from the affective disorder evaluation unit were administered the MCMI followed by a diagnostic interview containing both a structured and non-structured interview format. The interviews were conducted by trained clinicians (staff psychiatrists and clinical psychologists) from the affective disorder evaluation unit. During the structured portion of the interview, the subjects received the HRSD, MRS, and a global mood rating. The non-structured interview gathered information concerning the subjects' psycho-social, psychiatric, and medical histories, and was used in determining the psychiatric diagnoses. Those subjects given an affective disorder diagnosis were selected for this study and were divided into bipolar and unipolar groups using DSM-III criteria. The bipolar group ($n = 78$) consisted of those individuals who received a diagnosis of an affective disorder with at least one manic episode. The unipolar group ($n = 177$)

contains individuals with a diagnosis of clinical depression with no manic episodes. Each diagnosis was reached through consensus by the clinical team performing the psychiatric evaluation.

The two diagnostic groups were further divided according to their mood state at the time of interview. The bipolar group was divided into manic ($\underline{n} = 15$), depressed ($\underline{n} = 32$), and euthymic ($\underline{n} = 31$) subgroups, while the unipolar group was divided into depressed ($\underline{n} = 160$) and euthymic ($\underline{n} = 17$) subgroups. The presence of a manic, depressed, or euthymic mood state was determined by scores on the HRSD, MRS, and global mood rating. Those subjects with scores greater than 17 on the HRSD, less than 9 on the MRS, and global mood ratings of mildly depressed, moderately depressed, or severely depressed were considered depressed at the time of interview. Those subjects scoring 17 or less on the HRSD, 9 or above on the MRS, and receiving global mood ratings of hypomanic or manic were considered manic at the time of interview. Subjects scoring 17 or less on the HRSD, 8 or below on the MRS, and receiving a global mood rating of euthymic were considered euthymic at the time of interview. The cut-off score of 17 for the HRSD was used to distinguish depressed from euthymic groups based on the use of this score in discriminating

depressed from non-depressed patients in drug evaluation studies (Shaw, Vallis, & McCabe, 1985). In the case of the MRS, the literature does not provide definitive cut points to distinguish manic from euthymic groups. In the Young et al., (1978) study, a median score of 12.5 was found for the euthymic group. A conservative cut-off score of 8 was chosen in this study to insure that those subjects in the euthymic group would be free of manic symptomatology.

Inter-rater reliability was not determined for the mood measures during data collection. However, as noted previously the literature suggests that the HRSD and MRS show acceptable reliability coefficients when, as in this case, administered by trained clinicians. Additionally, to insure adequate reliability and validity of the criterion for mood group membership, each subject was assessed by all three mood measures. Those subjects not meeting the three criteria of the mood measures were not included in the experimental groups.

The normal comparison subjects ($n = 111$) were administered the MCMI as a part of their screening for medical illness. Independent measures of mood were not available for these subjects. However, their affective state, as a group, was assumed to be within normal

limits (euthymic) at the time of their medical screening. As a check of this assumption, the mean base rate scores for the Dysthymia (\underline{M} = 53.35, \underline{SD} = 26.03) and Hypomania (\underline{M} = 28.21, \underline{SD} = 26.73) scales of the MCMI were examined for these normal subjects. Both mean scores were found to be below the 75 base rate cut-off score, suggesting that as a group these subjects did not show appreciable symptoms of mania or depression. These symptom scales were not used in the original selection of the normal group due to their inter-correlation with several of the Basic Personality Scales.

Table 1 presents the mean ages and frequencies for the gender and racial compositions in each mood group. A one-way analysis of variance was performed to assess the effect for age differences between the diagnostic groups in the euthymic mood. The ANOVA revealed a significant age effect, $\underline{F}(2, 156) = 11.76$, $\underline{p} < .001$. A Newman-Keuls procedure indicated that the mean age of the normals (\underline{M} = 47.66, \underline{SD} = 10.62) differed significantly ($\underline{p} < .05$) from both the unipolar euthymic (\underline{M} = 36.00, \underline{SD} 14.86) and bipolar euthymic (\underline{M} = 39.58, \underline{SD} = 12.11) groups, while these two groups did not differ significantly from each other. The normals were matched for age (\underline{n} = 48) to the unipolar and bipolar euthymic groups, thereby eliminating this age effect,

Table 1

Means, Standard Deviations, and Frequencies of Demographic Data for
Diagnostic Mood Groups

	<u>AGE</u>		<u>SEX</u> Frequency		<u>RACE</u> Frequency		
	Mean	SD	Male	Female	White	Black	Other
Bipolar (<u>n</u> = 78)							
Manic	34.00	(10.35)	6	9	12	3	0
Depressed	39.56	(13.49)	13	19	31	1	0
Euthymic	39.58	(12.11)	16	15	30	1	0
Unipolar (<u>n</u> = 177)							
Depressed	40.86	(13.67)	78	82	138	16	6
Euthymic	36.00	(14.86)	6	11	17	0	0
Normal (<u>n</u> = 48)							
	49.98	(10.38)	27	21	42	6	0

$F(2,93) = 1.11, ns$. The normal subjects were not matched for gender or race, as repeated-measure ANOVAs indicated no significant interactions between sex or race and the Millon scale scores, $F(7, 630) = 2.52, ns$ and $F(7,658) = 0.88, ns$, respectively. In this case the Basic Personality Scales were used as repeated measures.

RESULTS

Personality Differences between Diagnostic Groups

It was predicted that the bipolar euthymic, unipolar euthymic, and normal subjects differ significantly in their configurations on the eight Basic Personality Scales on the MCMI. Given the inter-dependency between several of the personality scales, a repeated-measure ANOVA was used to examine pattern differences. A significant interaction between diagnosis and the eight Millon scales was found supporting the hypothesized pattern differences between diagnostic groups in the euthymic mood, $F(14,1071) = 6.52$, $p < .001$, and specifically between the unipolar and bipolar groups, $F(7,308) = 6.26$, $p < .001$.

It was also hypothesized, in accordance with Millon's (1981) theory of personality and depression, that the Narcissistic and Histrionic scales would be significantly greater for the bipolar euthymics compared to unipolar euthymic and normal subjects; while the Avoidant, Dependent, and Passive-Aggressive scales would be significantly greater for the unipolar euthymics compared to the bipolar euthymics and normals. A series of planned comparison t tests were performed to test these predictions. Table 2 presents the mean base rate

Table 2

Mean Personality Scores for Hypothesized Scales
Between Diagnostic Groups.

Scale	Diagnosis		
	Unipolar	Bipolar	Normal
Histrionic			
<u>M</u>	58.06	77.90*** ^a	61.50
<u>SD</u>	26.59	17.31	19.35
Narcissistic			
<u>M</u>	53.35	74.58**** ^a	63.60
<u>SD</u>	24.94	18.78	18.13
Avoidant			
<u>M</u>	49.29** ^a	31.10	29.90
<u>SD</u>	25.72	24.88	24.27
Dependent			
<u>M</u>	54.47* ^b	43.52	41.56
<u>SD</u>	28.16	25.60	21.94
Passive-Aggressive			
<u>M</u>	53.06**** ^b	46.29	29.27
<u>SD</u>	26.59	31.30	24.06

(continued)

Table 2 (continued)

Mean Personality Scores for Hypothesized Scales
Between Diagnostic Groups.

Note. The values represent mean base rate scores of each scale for unipolar, bipolar, and normal groups. One-tailed t tests compared means across groups and were justified by directional hypotheses.

^aThis mean score is significantly greater than each of the other two diagnostic groups.

^bThis mean score is significantly greater than the mean for the normal group.

*p < .05

**p < .025

***p < .005

****p < .001

scores for each of the hypothesized personality scales. As expected, the bipolar euthymics scored significantly higher than the unipolar euthymics and normals on the Narcissistic, $t(46) = 3.33$, $p < .001$, and $t(77) = 2.59$, $p < .01$, respectively and Histrionic $t(46) = 3.13$, $p < .005$, and $t(77) = 3.83$, $p < .001$, scales, respectively; while the unipolar euthymics scored significantly higher on the Avoidant scale than the bipolar euthymic, $t(46) = 2.39$, $p < .025$, and normal, $t(63) = 2.79$, $p < .005$, groups. However, the unipolar euthymics only scored significantly higher than the normals for the Dependent, $t(63) = 1.93$, $p < .05$, and Passive-Aggressive, $t(63) = 3.41$, $p < .001$ scales.

Although these findings support several of Millon's predictions concerning the relationships between personality styles and affective disorders, the comparison of mean base rate scores does not take into account differences in each subject's overall level of performance on the eight MCMI scales. The purpose of performing individual scale comparisons is to assess how each scale contributes to the overall interaction between the diagnostic groups and the Millon scales. However, the main effect for diagnosis in the repeated-measure ANOVA was significant, $F(2,90) = 3.85$, $p < .025$. This suggests that the differences in diagnostic groups

accounted for a significant amount of variance when each subject's personality scores were averaged across the eight scales. Thus, the examination of the components of the groups by scales interaction using mean base rate score comparisons is confounded by the main effect for diagnosis.

Deviation scores were completed for each subject in order to examine individual scale differences independent of the main effect. Each subject's averaged base rate score across the eight scales was subtracted from their base rate score for each scale. One-way ANOVAs were performed on the eight scales testing group differences using the deviation scores. The mean deviation scores and results of the one-way ANOVAs for the five scales relevant to the experimental hypotheses are presented in Table 3. As can be seen, four of the five scales showed significant differences between groups. Contrary to expectation, the Dependent scale did not show a significant effect for diagnosis. The significant ANOVAs were followed by planned comparison t tests to test Millon's (1981) theorized scale relationships. As predicted, the bipolar euthymic group showed significantly higher deviation scores on the Histrionic scale compared to the unipolar euthymic, $t(46) = 2.87, p < .005$, and the normal, $t(77) = 2.54,$

Table 3

Mean Deviation Scores and Results of One-Way ANOVAs for Hypothesized Scales
Between Diagnostic Groups.

Scale	Diagnosis						F(2,93)
	Bipolar (<u>n</u> = 31)		Unipolar (<u>n</u> = 17)		Normal (<u>n</u> = 48)		
	Mean	SD	Mean	SD	Mean	SD	
Avoidant	-22.62	(19.04)	-2.82 ^a	(22.40)	-18.64	(20.59)	5.42*
Dependent	-10.21	(23.43)	2.35	(24.16)	- 6.98	(21.20)	1.75
Passive- Aggressive	- 7.44	(24.87)	1.81 ^b	(26.58)	-19.27	(19.38)	6.00**
Narcissistic	20.85 ^c	(18.66)	1.24	(17.81)	15.07	(17.94)	5.48*
Histrionic	24.17 ^a	(18.11)	5.94	(25.71)	12.96	(19.80)	5.02*

Note. The values represent mean deviation scores of each scale for unipolar euthymic, bipolar euthymic, and normal groups. One-way ANOVAs and planned contrasts were performed. One-tailed t tests compared means across groups and were justified by directional hypotheses.

(continued)

Mean Deviation Scores and Results of One-way ANOVAs for Hypothesized Scales
Between Diagnostic Groups.

^aThis mean score is significantly greater than each of the other two diagnostic groups at $\underline{p} < .01$.

^bThis mean score is significantly greater than the mean for the normal group at $\underline{p} < .001$.

^cThis mean score is significantly greater than the mean for the unipolar group at $\underline{p} < .001$.

* $\underline{p} < .01$

** $\underline{p} < .005$

$p < .01$, groups; while the unipolar euthymics showed significantly higher deviation scores compared to the bipolar euthymics, $t(46) = 3.24$, $p < .005$, and normals, $t(63) = 2.66$, $p < .01$ for the Avoidant scale. For the Narcissistic scale, the bipolars were significantly higher than the unipolars, $t = 3.57$, $p < .001$, but were not significantly different from the normals, $t(77) = 1.38$, ns. The unipolars were significantly greater than the normals, $t(63) = 3.38$, $p < .001$ on the Passive-Aggressive scale, but showed no significant difference when compared to the bipolars, $t(46) = 1.12$, ns.

Table 4 presents the mean deviation scores and results of one-way ANOVAs for the non-hypothesized scales between diagnostic groups. As the table indicates, all the ANOVAs were significant and were followed by the Newman-Keuls procedure to test pairwise comparisons between the diagnostic groups. For the Schizoid scale, the unipolar and normal groups scored significantly higher than the bipolars, while not differing significantly from each other. The bipolars scored significantly higher deviation scores than the unipolars on the Antisocial scale, while neither group differed significantly from the normals. For the Compulsive scale, the normals scored significantly higher deviation scores than both the unipolars and

Table 4

Mean Deviation Scores and Results of One-way ANOVAs for Non-Hypothesized Scales Between Diagnostic Groups.

Scale	Diagnosis						F(2,93)
	Bipolar (<u>n</u> = 31)		Unipolar (<u>n</u> = 17)		Normal (<u>n</u> = 48)		
	Mean	SD	Mean	SD	Mean	SD	
Schizoid	-24.28 ^a	(14.92)	-13.29	(26.28)	-13.12	(19.84)	3.33*
Antisocial	13.37 ^b	(17.01)	- 2.35	(17.81)	8.21	(18.78)	4.17**
Compulsive	6.17	(25.37)	7.77	(27.18)	21.77 ^c	(15.03)	6.08***

Note. The values represent mean deviation scores of each scale for unipolar euthymic, bipolar euthymic, and normal groups. One-way ANOVAs followed by the Newman-Keuls procedure were performed.

^aThis mean score is significantly less than the mean scores for each of the other two diagnostic groups at $p < .05$.

^bThis mean score is significantly greater than the mean for the unipolar group at $p < .05$.

(continued)

Table 4 (continued)

Mean Deviation Scores and Results of One-way ANOVAs for Non-Hypothesized Scales Between Diagnostic Groups.

^cThis mean score is significantly greater than the mean scores for each of the other two diagnostic groups at $\underline{p} < .05$.

* $\underline{p} < .05$

** $\underline{p} < .025$

*** $\underline{p} < .005$

bipolars while these groups did not differ significantly from each other.

Personality Differences between Mood Groups

It was hypothesized that if the personality configurations for the unipolar and bipolar subjects represent longstanding and stable personality styles, then these configurations should not differ significantly between mood groups within each diagnostic category. To test this hypothesis, repeated-measure ANOVAs were used to assess the stability of the personality patterns between the mood groups for the unipolar and bipolar subjects. The results showed significant interactions between mood and the Millon scales indicating personality pattern differences between mood groups for the bipolar, $F(14,504) = 16.11$, $p < .001$, and unipolar, $F(7,1211) = 7.12$, $p < .001$, subjects.

To further assess the nature of the personality differences found between mood groups, the effects for age, race and gender were considered. One-way ANOVAs found non-significant main effects for mood by age for both the unipolar, $F(1,175) = 1.91$, ns, and bipolar, $F(2,75) = 1.22$, ns, mood groups. In addition, repeated-measure ANOVAs found no significant interactions between race and the Millon scales for both the unipolar, $F(14,$

1218) = 1.25, ns, and bipolar, $F(7,532) = 0.61$, ns, mood groups. However, repeated-measure ANOVAs showed significant interactions for sex and the Millon scales for both the bipolar, $F(7,504) = 2.65$, $p < .01$, and unipolar, $F(7,1211) = 2.10$, $p < .05$, mood groups. Further analyses examined the mood by scales interaction for males and females separately in both diagnostic groups. For bipolars, the mood by scales interaction was significant for both the males, $F(14, 224) = 10.00$, $p < .001$, and females, $F(14,280) = 7.34$, $p < .001$. The mood by scales interaction for unipolars was significant for the females, $F(6,637) = 9.93$, $p < .001$, but was not significant for the males, $F(7, 574) = 1.13$, ns.

In addition to considering the effects of demographic variables on the personality styles, the relationships of individual scales to the mood groups were examined. Given that the main effects for mood on the repeated-measure ANOVAs were significant for both the bipolar, $F(2,72) = 6.23$, $p < .005$, and unipolar, $F(1,173) = 12.46$, $p < .001$ mood groups, deviation scores were used in place of the mean base rate scores to compare the mood groups differences for each scale. Table 5 presents the mean deviation scores and results of one-way ANOVAs for the bipolar mood groups for each personality scale. As can be seen, all eight

personality scales showed significant main effects for mood. The Newman-Keuls procedure was used to assess the significant pairwise comparisons for each scale (see Table 5). For the Schizoid, Avoidant, Dependent, and Passive-Aggressive scales, the depressed group had significantly greater deviation scores than both the manic and euthymic groups, while these groups did not differ significantly from each other. For the Histrionic, Narcissistic, and Antisocial, and Compulsive scales, the manic and euthymic groups were both significantly greater than the depressed groups, while they did not differ significantly from each other.

Table 6 presents the mean deviation scores and results of one-way ANOVAs for the unipolar mood groups for each personality scale. Only one scale, Dependent, showed a non-significant main effect for mood. For the Schizoid, Avoidant, and Passive-Aggressive scales, the depressed group scored significantly higher deviation scores than the euthymic group. For the Histrionic, Narcissistic, Antisocial, and Compulsive scales, the euthymic group scored significantly higher than the depressed group.

An important consideration in examining the effect of mood on the MCMI personality scales is the degree of severity of the manic versus depressed symptoms in this

Table 5

Mean Deviation Scores and Results of One-way ANOVAs for Bipolar Mood Groups

Scale	Mood						$F(2,75)$
	Manic ($\underline{n} = 15$)		Depressed ($\underline{n} = 32$)		Euthymic ($\underline{n} = 31$)		
	Mean	SD	Mean	SD	Mean	SD	
Schizoid	-25.32	(20.25)	0.57 ^a	(23.59)	-24.28	(14.92)	15.14**
Avoidant	-21.25	(18.31)	12.75 ^a	(17.29)	-22.63	(19.04)	34.81**
Dependent	-11.38	(19.23)	10.00 ^a	(29.87)	-10.21	(23.43)	6.10*
Histrionic	17.82	(27.67)	-3.18 ^b	(26.96)	24.17	(18.11)	10.86**
Narcissistic	29.15	(15.83)	-14.06 ^b	(20.46)	20.85	(18.66)	38.16**
Antisocial	15.82	(9.81)	-11.09 ^b	(21.16)	13.37	(17.01)	18.98**
Compulsive	2.95	(19.20)	-16.50 ^b	(26.43)	6.17	(25.37)	7.26**
Passive- Aggressive	-7.78	(13.92)	21.50 ^a	(20.19)	-7.44	(24.87)	17.62**

(continued)

Table 5 (continued)

Mean Deviation Scores and Results of One-way ANOVAs for Bipolar Mood Groups

Note. The values represent mean deviation scores for the bipolar manic, bipolar depressed, and bipolar euthymic groups. One-way ANOVAs followed by the Newman-Keuls procedure were performed to compare means for each scale.

^aThis mean score is significantly greater than each of the other two mood groups at $\underline{p} < .05$.

^bThis mean score is significantly less than each of the other two mood groups at $\underline{p} < .05$.

* $\underline{p} < .005$

** $\underline{p} < .001$

Table 6

Mean Deviation Scores and Results of One-way ANOVAs
for Unipolar Mood Groups

Scale	Mood				$F(1,17)$
	Depressed ($\underline{n} = 160$)		Euthymic ($\underline{n} = 17$)		
	Mean	SD	Mean	SD	
Schizoid	7.58	(21.57)	-13.29	(26.28)	13.78****
Avoidant	16.78	(19.18)	- 2.82	(22.40)	15.54****
Dependent	13.35	(26.19)	2.35	(24.16)	2.75
Histrionic	-12.07	(25.88)	5.94	(25.71)	7.45**
Narcissistic	-21.51	(21.10)	1.24	(17.81)	17.11****
Antisocial	-18.38	(21.09)	- 2.35	(17.81)	9.11***
Compulsive	- 6.31	(23.95)	7.77	(27.18)	5.17*
Passive- Aggressive	20.56	(17.59)	1.18	(26.58)	16.70****

Note. The values represent mean deviation scores of each scale for unipolar depressed and unipolar euthymic groups.

* $p < .025$

** $p < .01$

*** $p < .005$

**** $p < .001$

sample. For the bipolar depressed subjects, the distribution of scores on the HRSD appear normal, with a median score of 26.50. This score falls in the severely depressed range according to the cut-off scores suggested by Hamilton (1967). For the bipolar manic subjects, the frequency of MRS scores appears normally distributed as well, with a median score of 20.00, which falls in the mild to moderate manic range (Young et al., 1978). In addition, none of the MRS scores reach the suggested median level for severely manic symptoms. In the unipolar depressed group, the scores on the HRSD are also approximately normally distributed, with a median of 29.30, which also falls in the severely depressed range. Thus, the subjects in the depressed mood groups appear to be more severe in the degree of their symptoms than the subjects in the manic mood.

DISCUSSION

The present study has attempted to address two major questions concerning the relationship between personality traits and affective disorders. First, the primary question of whether unipolar and bipolar affective disordered patients show distinct differences in their personality traits was addressed. The personality styles of unipolar, bipolar, and normal subjects in a symptom-free or euthymic state were compared. The second question examined the effect of mood states typically associated with these disorders on personality measurement and functioning. The personality styles of manic, depressed, and euthymic mood groups were compared for the bipolar patients, while the personality patterns of the depressed and euthymic groups were compared for the unipolars.

Personality Differences between Symptom-Free Diagnostic Groups

It was hypothesized that the unipolar euthymic, bipolar euthymic, and normal subjects differ significantly in their personality style configurations on the MCMI. This prediction was supported by the significant interaction between the diagnostic groups and the eight Basic Personality Scales, as well as by

the group comparisons for the individual scales using deviation scores. This finding supports the distinction between unipolar and bipolar groups based on observed differences in personality traits evidenced in past literature (e.g., Matussek & Reil, 1983). However, the current findings are based on the measurement of personality traits using the MCMI, which follows a specific theory of personality and psychopathology developed by Millon (1981). Thus, these results also serve to test Millon's theorized relationships between personality styles and the affective disorders.

It was predicted that the bipolar group would show higher scores on the Narcissistic and Histrionic scales compared to the unipolars and normals; while the unipolars would score higher on the Avoidant, Dependent, and Passive-Aggressive scales. Only partial support for these theorized group by scales relationships was shown. Consistent with Millon's theory, the bipolar subjects showed significantly more histrionic personality features than the unipolar and normal subjects; and the unipolars showed significantly more avoidant personality features than the bipolars and normals. However, the bipolars showed significantly more narcissistic features than the unipolars, but were not different from the normals; and both the unipolars and bipolars showed

significantly higher levels of passive-aggressive features compared to the normal groups. In addition, there were no significant differences between groups for the Dependent scale. Thus, the relationships between the Dependent, Narcissistic, and Passive-Aggressive scales and the diagnostic groups did not meet the expectations of Millon's theory.

The three remaining scales, whose relationship to the groups were not predicted, provide additional information about the personality components of the unipolar and bipolar groups. The unipolar and normal groups showed significantly more schizoid personality features than the bipolars; while the bipolars and normals showed significantly more antisocial traits than the unipolars. Finally, the normals showed more compulsive personality features than both the unipolar and bipolar groups. From these findings, as well as those from the hypothesized scales, it is possible, using Millon's (1984) personality descriptions for each scale, to describe both the distinct and common personality features of the unipolar and bipolar groups. The unipolar patients are distinguished from the bipolar and normal groups by higher levels of social anxiety, fear of interpersonal contact, and guardedness; and lower levels of indifference, confidence, self-esteem,

impulsivity, and acting out without guilt feelings. The bipolar patients are distinct from unipolars and normals by higher levels of activity, impulsivity, and overactivity; and lower levels of lethargy, emotional distancing from others, and objectivity in social relationships. In addition, both the unipolar and bipolar groups can be distinguished from the normal group by higher levels of emotional ambivalence, internal conflict, and frustration; and lower levels of discipline, concern for social convention, and emotional constriction.

These descriptions of the unipolar and bipolar groups appear to be generally consistent with those found in psychoanalytic, cognitive, and psychometric studies (e.g., Jacobson, 1971; Sacco & Beck, 1985; Matussek & Reil, 1983, respectively), with one important exception. The current study did not find dependency to be a significant personality style for either the unipolar or bipolar subjects. Thus, the notions of the psychoanalytic "oral dependent personality" (Birtchnell, 1984) and the cognitive "interpersonally dependent" type (Sacco & Beck, 1985) were not supported by these results.

Effect of Mood on Personality in Affective Disorders

Changing mood states have been shown to affect trait measurement in depressed groups (Hirschfeld, et al., 1983). However, it is unclear the degree to which the Basic Personality Scales of the MCMI are affected by differing mood states within the unipolar and bipolar groups. McMahon and Davidson (1985) have shown several personality scales of the MCMI to correlate with scales of the Profile Mood States (a state measure of depression) for an alcoholic inpatient population. However, it was hypothesized that if the personality style of unipolar and bipolar euthymic groups represent the underlying personalities present in their disorders, then mood states should not significantly alter the pattern of personality styles. This hypothesis was clearly not supported in the current study. The findings were, however, consistent with those of Hirschfeld et al. (1983) and McMahon and Davidson (1985). Both the overall test of configurational differences and the specific scale comparisons demonstrated a strong influence of mood state on personality measurement in unipolar and bipolar affective disordered groups.

In the unipolar mood groups, seven of the eight personality scales showed significant differences

between the depressed and euthymic groups. Only the Dependent scale was unaffected by the depressed mood. The depressed group scored higher deviation scores on the Schizoid, Avoidant, and Passive-Aggressive scales; while the euthymic group scored higher on the Histrionic, Narcissistic, Antisocial, and Compulsive scales. For bipolars, the Schizoid, Avoidant, Dependent and Passive-Aggressive scales showed significantly higher deviation scores for the depressed group compared to the manic and euthymic groups. In addition, the depressed group scored significantly lower than the other two groups on the Narcissistic, Histrionic, Antisocial, and Compulsive scales. The manic group, however, did not differ significantly from the euthymic group on any of the personality scales.

Initially these findings seem to indicate that the depressed mood strongly affects personality style measurement, while manic mood states do not affect personality styles. This conclusion, however, cannot be drawn so easily, as it is necessary to consider the severity of the symptoms experienced in the manic and depressed mood groups. From examining the distribution of mood rating scores for both the manic and depressed groups, it is clear that a majority of those subjects in the depressed mood groups can be classified as severely

depressed, while the majority of the manic subjects can be classified as mildly or moderately manic. Thus, the lack of an effect of mania on the personality scales may be the result of a milder level of symptoms compared to the depressed groups. Further study is needed to address the question of how severe manic mood states affect personality styles. At this point, it seems clear that personality styles need to be assessed when a depressed patient is symptom-free or euthymic, in order to obtain accurate personality measurement.

In addition, the significant interaction between sex and the Millon scales found for both the bipolar and unipolar mood groups represents an additional factor in determining the effect of mood on personality for this sample. The analyses examining the mood by scales interaction for males and females separately, provides evidence that the personality configuration of the unipolar depressed group did not differ significantly from the euthymics for males. Thus, for the male unipolars, the personality style configurations maintained stability across mood groups. This effect was not found in the males or females in the bipolar group or for the females in the unipolar group. An examination of the frequencies for gender in Table 1 shows that the bipolar manic and depressed groups both

have approximately one third more females than males, while the males and females of the bipolar euthymics were approximately equal in number. In the unipolar groups, the number of depressed males approximately equals the number of females, while the females in the euthymic group are close to twice the number of males. This apparent imbalance in the frequencies of gender within the mood groups could account for the significant sex by scales interactions. However, no clear pattern from the frequency data seems able to explain this effect entirely. Thus, further research is warranted to specifically address the issue of gender differences in personality patterns for affective disorders.

Another important issue which has not been directly addressed in this study relates to the question of how personality interacts with affective disorders. The majority of theorists studying personality and depression have given trait characteristics an etiological role in the origins of affective disorders (Wetzel, 1984). However, Millon has supported a pathoplastic model of personality and depression, where personality styles interact with affective syndromes to shape the expression of symptoms (Millon & Kotik, 1985). Although it is beyond the nature of this study to address the etiological versus pathoplastic question,

this study has shown a strong interaction between depressed mood and trait measurement in affective disorders. This finding seems to lend some support to the pathoplastic model, but by no means excludes the model of personality as an etiological component of clinical depression. Further research using a longitudinal design would be much more able to address this question.

In conclusion, this study has demonstrated strong support for personality or trait differences between unipolar, bipolar, and normal subjects. Partial support for Millon's theorized relationships between personality styles and affective disorders was also shown. Mood differences, specifically depressed mood states, were shown to have a strong effect on personality style measurement, while moderately manic mood states do not affect changes in personality styles within bipolar patients. Further research is recommended to address the effect of severe manic states on personality measurement, as well as the effect of gender differences on the personality style of affective disorders. Finally, the overriding question of how personality interacts with affective disorders needs further study. The strong effects found in this study for personality differences between mood groups could lend support to

the pathoplastic model of personality and depression.
However, personality as an etiological factor in
affective disorders remains to be empirically tested.

REFERENCES

- Abramson, L.Y., Seligman, M.E.P., & Teasdale, J. (1978). Learned helplessness in humans: Critique and reformulation. Journal of Abnormal Psychology, 87, 49-74.
- Agren, H. (1983). Depression and altered neuro-transmission: States, traits and interactions. In J. Angst (Ed.), The origins of depression: Current concepts and approaches. New York: Springer-Verlag.
- American Psychiatric Association (1980). Diagnostic and statistical manual of mental disorders, (3rd Ed.). Washington, DC: American Psychological Association.
- Asberg, M., Martensson, B., & Wagner, A. (1986). Biochemical markers of serotonin functions in depression and suicidal behavior. In H. Higgins, G.L. Klerman, and N. Matussek (Eds.), New results in depression research. New York: Springer-Verlag.
- Bech, P., Bowling, T.G., Kramp, P., & Rafaelsen, O.J. (1979). The Beck-Rafaelsen mania scale and the Hamilton Depression Scale. Acta Psychiatrica Scandanavia, 59, 420-430.

- Bech, P., Shapiro, R.W., Sihm, B., Nielsen, M., Sorensen, B., & Rafaelsen, O.J. (1980). Personality in unipolar and bipolar manic-melancholic patients. Acta Psychiatrica Scandinavia, 62, 245-257.
- Beck, A.T. (1974). The development of depression: A cognitive model. In R.J. Friedman, & M.M. Katz (Eds.), The psychology of depression: Contemporary theory and research. Washington, DC: Winston.
- Beck, A.T. (1981). Cognitive theory of depression: New perspectives. In P. Clayton & J. Barren (Eds.), Treatment of depression: Old controversies and new approaches. New York: Raven Press.
- Birtchnell, J. (1984). Dependence and its relationship to depression. British Journal of Medical Psychology, 57, 215-225.
- Blatt, S.J. (1974). Levels of object representation in anaclitic and introjective depression. The Psychoanalytic Study of the Child, 29, 107-157.
- Blatt, S.J., D'Afflitti, P., & Quinlan, D.M. (1976). Experiences of depression in normal young adults. Journal of Abnormal Psychology, 85, 203-223.

- Blatt, S.J., Quinlan, D.M., Chevron, E.S., McDonald, C., & Zuroff, D. (1982). Dependency and self-criticism: Psychological dimensions of depression. Journal of Consulting and Clinical Psychology, 50, 113-124.
- Chodoff, P. (1972). The depressive personality: A critical review. Archives of General Psychiatry, 27, 666-673.
- Coyne, J.C., & Gotlieb, I.H. (1983). The role of cognition in depression: A critical appraisal. Psychological Bulletin, 94, 472-505.
- Hamilton, M. (1967). Development of a rating scale for primary depressive illness. British Journal of Social and Clinical Psychology, 6, 278-296.
- Hamilton, M. (1985). The Hamilton Rating Scale for Depression. In N. Sartorius & T.A. Ban (Eds.), Assessment of depression. New York: Springer-Verlag.
- Hedlund, J.L. & Vieweg, B.W. (1979). The Hamilton Rating Scale for Depression: A comprehensive review. Journal of Operational Psychiatry, 10, 149-165.

- Hirschfeld, R.M.A. (1986). Personality and bipolar disorder. In H. Hippius, G.L. Klerman, & N. Matussek (Eds.), New results in depression research. New York: Springer-Verlag.
- Hirschfeld, R.M.A., Klerman, G.L., Clayton, P.J., Keller, M.P., McDonald-Scott, P., & Larkin, B.H. (1983). Assessing personality: Effects of the depressive state of trait measurement. American Journal of Psychiatry, 140, 695-699.
- Hirschfeld, R.M.A., Klerman, G.L., Chodoff, P., Korchin, S., & Barrett, J. (1976). Dependency-self-esteem-clinical depression. Journal of American Academy of Psychoanalysis, 4, 373-388.
- Jacobson, E. (1971). Depression: Comparative studies normal neurotic, and psychotic conditions. New York: International University Press, IWC.
- Klerman, G.L. (1973). The relationship between personality and clinical depression: Overcoming the obstacles to verifying psychodynamic theories. International Journal of Psychiatry, 11, 227-233.
- Matussek, P., & Feil, W.B. (1983). Personality attributes of depression patients. Archives of General Psychiatry, 40, 783-790.

- McMahon, R.C., & Davidson, R.S. (1985). An examination of the relationship between personality patterns and symptom/mood patterns. Journal of Personality Assessment, 49, 552-556.
- McMahon, R.C., Flynn, P.M., & Davidson, R.S. (1985). Stability of the personality and symptom scales of the Millon Clinical Multiaxial Inventory. Journal of Personality Assessment, 49, 231-234.
- Mendelson, M. (1974). Psychoanalytic concepts of depression. New York: Spectrum Publications, Inc.
- Millon, T. (1969). Modern Psychopathology. Philadelphia: V.B. Saunders.
- Millon, T. (1981). Disorders of personality: DSM-III Axis II. New York: John Wiley & Sons, Inc.
- Millon, T. (1983). Millon Clinical Multi-axial Inventory: Manual. Minneapolis, MN: Interpretative Scoring Systems.
- Millon, T. (1984). On the renaissance of personality assessment and personality theory. Journal of Personality Assessment, 48, 450-465.
- Millon, T. (1985). The MCMI provides a good assessment of DSM-III: The MCMI-II will prove even better. Journal of Personality Assessment, 49, 379-391.

- Millon, T., & Kotik, D. (1985). The relationship of depression to disorders of personality. In E.E. Beckham & W.R. Leber (Eds.), Handbook of depression: Treatment, assessment and research. Homewood, IL: The Dorsey Press.
- Mollon, P., & Parry, G. (1984). The fragile self: Narcissistic disturbance and the protective function of depression. British Journal of Medical Psychology, 57, 137-145.
- Paykel, E.S., & Norton, K.R.W. (1986). Self-report and clinical interview in the assessment of depression. In N. Sartorius & T.A. Ban (Eds.), Assessment of depression. New York: Springer-Verlag.
- Paykel, E.S., & Weissman, M.M. (1973). Social adjustment and depression. Archives of General Psychiatry, 24, 659-663.
- Perris, C., von Knorring, L., Perris, H., & Eisemann, M. (1983). Neurophysiological and biological correlates of personality in depressed patients. Advances in Biological Psychiatry, 13, 54-62.
- Peterson, C., & Seligman, M.E.P. (1984). Causal explanations as a risk factor for depression: Theory and evidence. Psychological Review, 91, 347-374.

- Peterson, C., & Seligman, M.E.P. (1985). The learned helplessness model of depression: Current status of theory and research. In E.E. Beckham & W.R. Leber (Eds.), Handbook of depression: Treatment, assessment and research. Homewood, IL: The Dorsey Press.
- Robert, J.A., Ryan, J.J., McEntyre, W.L., McFarland, R.S., Lips, O.J., & Rosenberg, S.J. (1985). MCMI characteristics of DSM-III post-traumatic stress disorder in Vietnam veterans. Journal of Personality Assessment, 49, 226-230.
- Sacco, W.P., & Beck, A.T. (1985). Cognitive theory of depression. In E.E. Beckham & W.W. Leber (Eds.), Handbook of depression: Treatment, assessment, and research. Homewood, IL: The Dorsey Press.
- Schwab, J.J., Bialow, M.R., & Holzer, C.E. (1967). A comparison of two rating scales for depression. Journal of Clinical Psychology, 23, 94-96.
- Sedvall, G. (1981). Neurotransmitter disturbances and predisposition to depressive illness. In J. Mendlewicz, A. Coppen, & H.M. von Praag (Eds.), Depressive illness: Biological and psychopharmacological issues. New York: S. Karger.

- Seligman, M.E.P. (1975). Helplessness: On depression, development and death. San Francisco, CA: W.H., Freeman and Company.
- Seligman, M.E.P., Abramson, L.Y., Semmel, A., & von Bayer, C. (1979). Depressive attributional style. Journal of Abnormal Psychology, 88, 242-247.
- Shaw, B.F., Vallis, T.M., & McCabe, S.B. (1985). The assessment of the severity and symptom patterns in depression. In E.E. Beckham & W.R. Leber (Eds.), Handbook of depression: Treatment, assessment and research. Homewood, IL: The Dorsey Press.
- Shopsin, B. (1979). Part I: Mania: Clinical aspects, rating scales, and incidence of manic-depressive illness. In B. Shopsin (Ed.), Manic illness. New York: Raven Press.
- Wetzel, J.W. (1984). Clinical handbook of depression. New York: Gardner Press, Inc.
- Whybrow, P.C., Akiskal, H.S., & McKinney, Jr., W.T. (1984). Mood disorder: Toward a new psychobiology. New York: Plenum Press.
- Widiger, T.A., Williams, J.B.W., Spitzer, R.L., & Frances, A. (1985). The MCMI as a measure of DSM-III. Journal of Personality Assessment, 49, 366-378.

Winokur, G., Clayton, P.J., & Reich, T. (1969). Manic depressive illness. St. Louis, MO: The C.U. Mosby Company.

Young, R.C., Biggs, J.T., Ziegler, V.E., & Meyer, D.A. (1978). A rating scale for mania: Reliability, validity and sensitivity. British Journal of Psychiatry, 133, 429-435.

APPENDIX

HAMILTON RATING SCALE FOR DEPRESSION

Instructions: For each item, circle the number preceding the description which best characterizes the patient.

1. Depressed Mood (sadness, hopeless, helpless, worthless)
 - 0 - Absent.
 - 1 - These feeling states indicated only on questioning.
 - 2 - These feeling states spontaneously reported verbally.
 - 3 - Communicates feeling states non-verbally i.e., through facial expression, posture, voice and tendency to weep.
 - 4 - Patient reports virtually only these feeling states in the spontaneous verbal and non-verbal communication.

2. Feelings of Guilt
 - 0 - Absent.
 - 1 - Self-reproach, feelings s/he has let people down.
 - 2 - Ideas of guilt or rumination over past errors or sinful deeds.
 - 3 - Present illness is a punishment. Delusions of guilt.
 - 4 - Hears accusing or denouncing voices and/or experiences threatening visual hallucinations.

3. Suicide
 - 0 - Absent.
 - 1 - Feels life is not worth living.
 - 2 - Wishes s/he were dead or any thoughts of possible death to self.
 - 3 - Suicide ideas or gesture.
 - 4 - Attempts at suicide.

4. Insomnia - Early
 - 0 - No difficulty falling asleep.
 - 1 - Complains of occasional difficulty falling asleep - i.e., more than 1/2 hour.
 - 2 - Complains of nightly difficulty falling asleep.

5. Insomnia - Middle
 - 0 - No difficulty.
 - 1 - Patient complains of being restless and disturbed during the night.
 - 2 - Waking during the night - and getting out of bed.

6. Insomnia - Late
 - 0 - Sleeps until awakened by staff.
 - 1 - Waking an early hours of the morning but goes back to sleep.
 - 2 - Unable to fall asleep again if gets out of bed.

7. Work and Activities
 - 0 - No difficulty.
 - 1 - Thoughts and feelings of incapacity, fatigue or weakness related to activities: work or hobbies.
 - 2 - Loss of interest in activity: hobbies or work - either directly reported by patient, or indirect in listlessness, indecision and vacillation (feels s/he has to push self to work or activities).
 - 3 - Decrease in actual time spent in activities or decrease in productivity.
 - 4 - Stopped working because of present illness.

8. Retardation (slowness of thought and speech; impaired ability to concentrate; decreased motor activity)
 - 0 - Normal speech and thought.
 - 1 - Slight retardation at interview.
 - 2 - Obvious retardation at interview.
 - 3 - Interview difficult.
 - 4 - Complete stupor.

9. Agitation
 - 0 - None.
 - 1 - "Playing with" hands, hair, etc.
 - 2 - Hand-wringing, nail-biting, hair-pulling, biting of lips.

10. Anxiety - Psychic
 - 0 - No difficulty.
 - 1 - Subjective tension and irritability.
 - 2 - Worrying about minor matters.
 - 3 - Apprehensive attitude apparent in face or speech.
 - 4 - Fears expressed without questioning.

11. Anxiety - Somatic Physiological concomitants of anxiety, such as:
- Gastrointestinal - dry mouth, wind, indigestion, diarrhea, cramps, belching
 - Cardiovascular - palpitations, headaches
 - Respiratory - hyperventilation, sighing
 - Urinary frequency
 - Sweating
- Rate severity of any or all as:
- 0 - Absent. 1 - Mild. 2 - Moderate
3 - Severe. 4 - Incapacitating
12. Somatic Symptoms, Gastrointestinal
- 0 - None.
 - 1 - Loss of appetite but eating without staff encouragement. Heavy feelings in abdomen.
 - 2 - Difficulty eating without staff urging. Requests or requires laxative or medication for bowels or medication for G.I. symptoms.
13. Somatic Symptoms, General
- 0 - None.
 - 1 - Heaviness in limbs, back or head. Backaches, headaches, muscle aches. Loss of energy and fatigability.
 - 2 - Any clear-cut symptom.
14. Genital Symptoms (symptoms such as: loss of libido, menstrual disturbances)
- 0 - Absent
 - 1 - Mild
 - 2 - Severe
 - 3 - Not ascertained
15. Hypochondriasis
- 0 - Not present.
 - 1 - Self-absorption (bodily)
 - 2 - Preoccupation with health.
 - 3 - Frequent complaints, requests for help, etc.
 - 4 - Hypochondriacal delusions.
16. Loss of Weight
- Rating by history:
- 0 - No weight loss.
 - 1 - Probable weight loss associated with present illness.
 - 2 - Definite (according to patient) weight loss.
- Weeking Ratings:
- 0 - Less than 1 lb. weight loss in week.
 - 1 - Greater than 1 lb. weight loss in week.
 - 2 - Greater than 2 lb. weight loss in week.

17. **Insight**
0 - Acknowledges being depressed and ill.
1 - Acknowledges illness but attributes cause to bad food, climate, overwork, virus, need for rest, etc.
2 - Denies being ill at all.
18. **Diurnal Variation**
If symptoms are worse in the morning or evening note which it is and rate severity of variation. Check either a.m. or p.m. and circle severity of variation.
a.m. (1) _____ 0 - Absent.
p.m. (2) _____ 1 - Mild
2 - Severe
19. **Depersonalization and Derealization (such as feelings of unreality, nihilistic ideas)**
0 - Absent 3 - Severe
1 - Mild 4 - Incapacitating
2 - Moderate
20. **Paranoid Symptoms**
0 - None.
1 - Mildly suspicious.
2 - Moderately suspicious.
3 - Ideas of reference.
4 - Delusions of reference and persecution.
21. **Obsessional and Compulsive Symptoms**
0 - Absent
1 - Mild
2 - Severe
22. **Helplessness**
0 - Not present.
1 - Subjective feelings which are elicited only by inquiry.
2 - Patient volunteers her/his helpless feelings.
3 - Requires urging, guidance and reassurance to accomplish ward chores or personal tasks.
4 - Requires physical assistance for dress, grooming, eating, bedside tasks or personal hygiene.

23. Hopelessness

- 0 - Not present.
- 1 - Intermittently doubts that "things will improve" but can be reassured.
- 2 - Consistently feels "hopeless" but accepts reassurances.
- 3 - Expresses feelings of discouragement, despair, pessimism about future, which cannot be dispelled.

24. Worthlessness (ranges from mild loss of esteem, feelings of inferiority, self-depreciation to delusional notions of worthlessness)

- 0 - Not present.
- 1 - Indicates feelings of worthlessness (loss of self-esteem) only on questioning.
- 2 - Spontaneously indicates feelings of worthlessness (loss of self-esteem).
- 3 - Different from (2) by degree: Patient volunteers that s/he is "no good," "inferior," etc.
- 4 - Delusional notions of worthlessness - i.e., "I am a heap of garbage" or its equivalent.

MANIA RATING SCALE

Name: _____ Date: _____
Location: _____

1. Elevated Mood
 - 0 - Absent.
 - 1 - Mildly or possibly increased on questioning.
 - 2 - Define subjective elevation; optimistic, self-confident; cheerful; appropriate to content.
 - 3 - Elevated, inappropriate to content; humorous.
 - 4 - Euphoric; inappropriate laughter; singing.

2. Increased Motor Activity - Energy
 - 0 - Absent.
 - 1 - Subjectively increased.
 - 2 - Animated; gestures increased.
 - 3 - Excessive energy; hyperactive at times; restless (can be calmed).
 - 4 - Motor excitement; continuous hyperactivity (cannot be calmed).

3. Sexual Interest
 - 0 - Normal; not increased.
 - 1 - Mildly or possibly increased.
 - 2 - Definite subjective increase on questioning.
 - 3 - Spontaneous sexual content; elaborates on sexual matters; hypersexual by self-report.
 - 4 - Overt sexual acts (toward patients, staff, or interviewer).

4. Sleep
 - 0 - Reports no decrease in sleep.
 - 1 - Sleeping less than normal amount by up to one hour.
 - 2 - Sleeping less than normal by more than one hour.
 - 3 - Reports decreased need for sleep.
 - 4 - Denies need for sleep.

5. Irritability
 - 0 - Absent.
 - 2 - Subjectively increased.
 - 4 - Irritable at times during interview; recent episodes of anger or annoyance on ward.
 - 6 - Frequently irritable during interview; short, curt throughout.
 - 8 - Hostile, unco-operative; interview impossible.

6. Speech (Rate and Amount)
 - 0 - No increase.
 - 2 - Feels talkative.
 - 4 - Increased rate or amount at times, verbose at times.
 - 6 - Push; consistently increased rate and amount; difficult to interrupt.
 - 8 - Pressured; uninterruptible, continuous speech.

7. Language - Thought Disorder
 - 0 - Absent.
 - 1 - Circumstantial; mild distractibility; quick thoughts.
 - 2 - Distractible; loss goal of thought; changes topics frequently; racing thoughts.
 - 3 - Flight of ideas; tangentiality; difficult to follow; rhyming, echolalia.
 - 4 - Incoherent; communication impossible.

8. Content
 - 0 - Normal.
 - 2 - Questionable plans, new interests.
 - 4 - Special project(s); hyperreligious.
 - 6 - Grandiose or paranoid ideas; ideas of reference.
 - 8 - Delusions; hallucinations.

9. Disruptive - Aggressive Behavior
 - 0 - Absent, co-operative.
 - 2 - Sarcastic; loud at times, guarded.
 - 4 - Demanding; threats on ward.
 - 6 - Threatens interviewer; shouting; interview difficult.
 - 8 - Assaultive; destructive; interview impossible.

10. Appearance
 - 0 - Appropriate dress and grooming.
 - 1 - Minimally unkempt.
 - 2 - Poorly groomed; moderately dishevelled; overdressed.
 - 3 - Dishevelled; partly clothed; garish make-up.
 - 4 - Completely unkempt; decorated; bizarre garb.

11. Insight

- 0 - Present; admits illness; agrees with need for treatment.
- 1 - Possibly ill.
- 2 - Admits behavior change, but denies illness.
- 3 - Admits possible change in behavior, but denies illness.
- 4 - Denies any behavior change.

Rater's Name: _____

Global Mood Rating

1. Manic
2. Hypomanic
3. Euthymic
4. Mildly Depressed
5. Moderately Depressed
6. Severely Depressed
7. Mixed Affective State

Rating Score _____

APPROVAL SHEET

The thesis submitted by Gene E. Alexander has been read and approved by the following committee:

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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 references to content and form.

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

4-15-87
Date


Director's Signature