The Nosology of Depression: 
The Endogenous-Reactive Concept

BY JOE MENDELS, M.B., CH.B., M.D., AND CARL COCHRANE, PH.D.

Controversies surrounding the distinctions between endogenous and reactive types have characterized the literature on depression. Reviewing seven pertinent factor analytic studies, these authors found sufficient consensus to support the independence of the endogenous and reactive factors. It is suggested, however, that these factors may not represent two etiologically distinct types of depression. The endogenous factor may reflect a "classical" depressive syndrome, whereas the reactive factor may reflect a psychiatric disorder in which depression is only one symptom "contaminated" by other nondepressive clinical features.

We do not know what causes depression, how to objectively define its presence, how to classify the various types of depression and whether the differences between them are quantitative or qualitative (if indeed there are separate types), or often, how to select the most appropriate treatment for a particular depressed patient.

The problems are compounded by the multiple use of the term "depression"—to describe a mood, a symptom, a syndrome, and a specific disease entity. Furthermore, a host of adjectives is used to delineate subtypes of depression. Depression has been described as "not a disease" (50) and as "an aggregate of various concrete diseases" (2). Sainz and Bigelow (46) stated that the term "depression" is becoming more and more nebulous despite its "illusory clarity and simplicity."

This semantic confusion creates a general problem of communication, hampers the comparison of results between studies, and makes it very difficult to select populations of depressed patients for specific investigations. While Kraepelin's descriptions brought some order half a century ago, they do not adequately serve in contemporary studies of treatment response, psychological testing, biochemical investigation, and so on.

There is reason to be concerned that we may obscure highly significant discrete groups of patients if we treat depression as one broad entity. For example, if we study the response of an unselected group of 100 depressed patients to a new drug and only 30 patients respond favorably, this might be regarded as an insignificant response and the treatment discarded. But to an increasing extent it is apparent that what we call depression is in fact a heterogeneous group of conditions when measured by such parameters as treatment response, hormonal assay, electrolyte balance, natural history, and signs and symptoms. Thus, the favorable response of some or all of the 30 patients might have been due to a specific effect on a condition shared by these patients but not by the others in the group.

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The Etiologic Classification

In 1896 Kraepelin coined the term "manic-depressive psychosis." He included, on the one hand, "the whole domain of the so-called periodic and circular insanities, on the other hand, mania, a greater part of the morbid states termed melancholia and, also, not an inconsiderable number of cases of amentia." (21). He later expanded the concept to include all cases of "affective excess."

Kraepelin accepted the etiologic classification proposed by Moebius (34) of "exogenous" illnesses, caused by bacterial, chemical, or other toxins, and of "endogenous" illnesses which arose from degenerative or hereditary disorders. The latter stemmed from Morel's (35) theory that psychiatric disorders were due to degeneration of germ plasm, i.e., hereditary. Thus Kraepelin wrote: "The principal demarcation in etiology is, above all, between internal and external causes. The two major groups of diseases, exogenous and endogenous, are thus naturally divided." (22).

This, in part, laid the basis for a nature/nurture splitting in the conceptualization of psychiatric disorders. It was in Kraepelin's view very much an either/or concept. In fact, he concluded that manic-depressive psychosis was "to an astonishing degree independent of external influences" (23).

It is unfortunate that Kraepelin's descriptive and phenomenological contributions to psychiatry should have become linked with these theoretical and etiological concepts. From this has stemmed much of our contemporary confusion; the tendency to assume etiology on the basis of observed phenomenology pervades many attempts at classification.

Lange (24, 25) elaborated on Kraepelin's dichotomization. He proposed that in addition to the endogenous (manic-depressive psychosis) and exogenous depressions, mixed forms could occur, with either the endogenous or exogenous component dominating. The group of endogenous depressions which followed on some environmental stress he termed "reactive."

Depression as One Continuum of Severity

Since the hypothesis of two distinct illnesses was proposed, it has been surrounded by disagreement and controversy. In 1926 Mapother opposed the prevailing distinction between "neurotic" and "psychotic" depression. He suggested that the practice had arisen because of the need to commit certain patients and was thus only a matter of expediency. He claimed that "neurotic" and "psychotic" depressions were continuous along a dimension of severity: "The degree to which internal and external factors cooperate (in their genesis) is infinitely variable" (30). (The use of the terms endogenous/reactive and psychotic/neurotic interchangeably is frequent but unfortunate as they reflect different dimensions of the problem.)

The opposition to Mapother's views was based primarily on impression and opinion. The view that psychotic depression was qualitatively distinct from neurotic depression was advanced on the grounds of spontaneous remissions, heredity, presence of remorse, personality differences, no response to psychotherapy, no relationship between environmental events and mood, the absence of precipitating factors, the absence of insight, the presence of diurnal variation, detachment from reality, autonomic and physical disturbances, fatigability and psychomotor sluggishness (5, 8, 43-45, 55, 56).

The only serious attempt to research the problem during this period was made by Gillespie (13). He divided 25 depressed patients into three groups: reactive or psychoneurotic; autonomous (i.e., independent of environmental stimuli); and involutional. There was no difference in the occurrence of "precipitating factors" between the reactive and autonomous groups. The main differentiating factor was "reactivity": the reactive patients showed emotional response to environmental changes, contrasted with the lack of responsiveness of the autonomous patients. Since the patients were separated on this basis initially, the only conclusion that can be reached is that some patients show less reactivity to the environment than do others. Gillespie did not attribute

any etiological significance to the term "reactive."

However, when his classification was integrated with Kraepelin's, the "autonomous" group was equated with the endogenous (manic-depressive psychosis) and the reactive group with the exogenous. As a consequence, etiologic and descriptive concepts were again confused.

In the 1930s Lewis published a series of papers reviewing the arguments and reporting a detailed study of 61 depressed patients(26-29). He concluded that there was no adequate evidence for the division of depressed patients into separate diagnostic categories.

Lewis sought the criteria of reactive disease as defined by Jaspers(19): a psychogenic determining factor; a corresponding uniformity of the content of the psychosis with a causal factor; dependence of the course of the psychosis upon changes in the situation; and disappearance of the morbid phenomena, with unconditional return to the normal state, when the traumatic factor is removed. He reported that no patient in his series satisfied all these criteria.

For example, he found that 51 of the 61 patients studied had a history of a precipitating situation, and concluded that precipitating factors could not be used to differentiate reactive from endogenous depression. It should be noted, however, that there were ten patients with no discernible precipitating factors and that there were also a number of patients with symptoms of depression prior to the occurrence of the alleged precipitating factor: "the patient had been tired, irritable, quarrelsome, quieter, rather worried, a little preoccupied, not quite herself, a little off color, worried about things, etc."(27). In yet others the personality "had always been a mild persistent picture of depression—pessimistic, hesitant, gloomy, anxious, unreliable; where the personality stopped and the illness began was a point calling for skillful casuistry; if thought worth deciding at all"(27). Thus, there were a number of patients in whom the illness appears to have arisen independently of the alleged precipitating factors.

The use of Jaspers' criteria illustrates some semantic and theoretical problems—

the emphasis on psychogenic causative factors and not any other type of stress, and also the use of the term "psychosis," which suggests a linking of depression, psychosis, and reactive to the exclusion of neurosis. This implies that a nonpsychotic illness might not be included in Lewis's concept of depression. Thus, he claimed that all depressed patients are potentially suicidal and that this is an indication of psychotic behavior. The criterion of a "return to normal with the removal of the traumatic factor" for the diagnosis "reactive" indicates that no allowance is made for the possibility that under some conditions a stress might precipitate an illness which could then become self-perpetuating.

A Therapeutic Classification

The increasing use of electroconvulsive therapy (ECT) for depression in the 1940s led to a therapeutic classification of depression and, with it, a changing concept of endogenous depression. It was argued that patients with endogenous depression responded much more favorably to ECT than did patients with reactive depression (7, 47, 48). However, the patients who responded well to ECT did not always fit Kraepelin's criteria for endogenous depression (manic-depressive psychosis).

It was extrapolated that if endogenous depression responded to ECT (a physical therapy) and exogenous depression responded best to psychotherapy, then, ipso facto, endogenous depression was an organic disorder and reactive depression a psychological disorder. Thus the therapeutic classification became an etiologic one.

Recent reports(6, 31, 32, 40) have confirmed the original claims that patients diagnosed as "endogenous depression" show a better response to ECT than do patients with "reactive depression." However, there was a considerable amount of overlap between the two groups(31, 32, 40). Thus, when Rose(40) classified his patients on "etiologic grounds only" (the presence or absence of a relevant precipitating factor) 22 out of the 50 patients studied had to be classed as "doubtful."

Mendels(31, 32) found the relationship
between clinical features and the diagnosis of endogenous or reactive depression to be a complex one, and the diagnosis could not be made on the basis of any individual signs and symptoms, however "typical" they may be of either state.

Partridge(37) correlated diagnosis with degree of recovery for 82 depressed patients who had been treated by prefrontal lobotomy. He concluded that there were two different disorders. However, there was considerable overlap in that symptoms subsided in all patients in whom "psychodynamics played an important part in the genesis of the illness" and in 67 percent of the endogenous depressives.

In an extensive review of the literature on manic-depressive psychosis, Bellak(2) concluded that it was not a single disease entity but consisted of several widely differing syndromes with different etiologies. He suggested that precipitating factors are present in most depressive illnesses to a varying degree. Minor traumatic events could be sufficient to precipitate an illness in an unstable personality. These may not be perceived and the illness is then called endogenous.

Ascher and Garmany have criticized the division of depression into endogenous and reactive types. Ascher(1) reviewed the case records of 97 patients diagnosed as suffering from neurotic depressive reaction (preceded by an appropriate precipitating event) and found that the clinical picture was "very inconsistent." He noted that there was no evidence that suicide, the "severest of all depressive phenomena," is more common in psychotic depression or that psychoneurotic depression is necessarily milder than psychotic. He maintained that "not only in symptomatology, but in dynamics as well, the division of depression into a neurotic or psychotic group is only arbitrary."

Ascher argued against the view that endogenous depression responds better to ECT than does reactive depression and claimed that those so-called neurotic depressions which do not respond well to ECT are misdiagnosed and are in fact "chronic neurotic reactions accompanied by discouragement... which is often very similar to the depressive mood, but usually does not constitute the patient's chief concern and preoccupation." Several other authors have suggested that the "reactive depressions" may be classed as other forms of neuroses. Ross(45) and Gillespie(13) regarded them as a variety of neurotic anxiety; and Curran and Mallinson(9) separated a group of "hysterical affective disorders." Unfortunately, Ascher did not report the details of his findings, but only conclusions and anecdotal evidence.

Garmany(12) reviewed 525 case histories in which sadness had been the primary and dominant symptom. He concluded that the distinction between endogenous and reactive depression is an "unreal one." He claimed, from inspection of his data, that constitutional loading and the incidence of stress factors were not significantly different in their distribution between the two groups. However, if what Garmany termed "personal stress factors" (i.e., those facets of personality structure which make living less easy, but do not of themselves predispose to a depression, e.g., "meticulous obsessional characters") are excluded, then the difference in the incidence of stress factors between the endogenous and reactive groups becomes statistically significant.

The separation of depression into two main types has received some support from the findings of the psychiatric geneticists. Hurst(18) reviewed the literature and concluded that manic-depressive psychosis has a genetic mechanism "irregularly dominant with a high degree of penetrance... This condition is genetically unrelated to a reactive or neurotic depression, to menopausal and presenile depressions or to other non-period forms of depressive behavior in the involutional period." Partial penetrance of a dominant autosomal mechanism could account for many of the mixed pictures of depression commonly seen and explain why precipitating factors may play an important role in "endogenous depression."

Other Approaches

New approaches to the classification of depression have been made by several investigators recently. Among the proposals are those of Blinder and Pollitt.

Blinder(3, 4) proposed what he terms a “pragmatic classification,” which involves five types of depression: physiologic retardation depression, tension depression, schizo-depression, depression secondary to some problem in living, and depression symptomatic of organic illness. While these labels avoid some of the problems inherent in our present system, they create problems of their own, and, as Blinder reports, the assignment of particular patients to these groups is often arbitrary.

Pollitt(38, 39) proposed that depressed patients be classified according to the presence (“S” type) or absence (“J” type) of the “depressive functional shift.” The J type (J = justified) is essentially a psychological illness precipitated by psychological stress and understandable in terms of the patient’s predicament. This diagnosis is only reached if all features of the functional shift are excluded. The S type (S = somatic) is characterized by the presence of a group of symptoms which result from “an alteration of biological rhythms, metabolism and autonomic balance, and are not seen collectively in any other illness”(38).

The value of this approach is yet to be assessed. The suggestion that the “somatic” features are either present or absent and that this could be used as an absolute criterion for diagnosis is unrealistically rigid. Further, no allowance has been made for the possibility that the S type might simply be a severe version of the J type—a J type which has gotten out of hand.

Somewhat reminiscent of Pollitt’s S type of depression is the concept of “vital depression,” which has played an important role in the classification of depression in Europe. Kurt Schneider regarded vital depression (vitale Traurigkeit) as “the cardinal symptom of all endogenous depression” (49).

Van Praag(51), in advocating a pragmatic classification based on phenomenology, has expanded the “vital depression” concept. He proposed two types of depression based on Schneider’s dichotomy of reactive depression and melancholia. He termed these personal depression (“the depression takes place in the sphere of the psychical feelings . . . [and] is congruent with the genetic situation”) and vital depression (“a depression in the vital affective sphere” with a group of characteristic features).

While basing his classification on Schneider’s concept, Van Praag rejects the identification of vital depression with the depressed phase of manic-depressive psychosis or endogenous depression(17, 49, 52, 54). To him the “vital” syndrome is a descriptive concept, whereas the term endogenous depression has etiological implications.

Forrest and associates(10) studied the relationship between the occurrence of environmental stress and the type of depression in a group of 158 patients. Comparing the “endogenous” depressives (each patient had at least four of the following features—retardation, early morning waking, impaired concentration, diurnal variation in mood, ideas of guilt, and self-reference) with the neurotic depressives, they found that the former were severely ill, but that “neither a history of previous depression nor a pre-admission experience of adverse social factors discriminated between the groups.” They concluded that . . . there is a group of depressive illnesses characterized by clinical severity, advancing years, the presence of guilt and retardation, and a satisfactory response to imipramine. The fact of responsiveness to environmental stress is neither more nor less marked than in a second group of patients, who are aged less than 45 years, show personality problems or well-marked neurotic defenses and usually are not so profoundly depressed . . . [Thus] the neurotic group may in fact be more neurotic but they are not in any way more reactive (at least in terms of social and medical factors we have studied)(10).

Factor Analysis in Nosology

Recently a number of studies have explored depressive nosology through the use of factor analytic techniques. The factor analytic mathematical model furnishes a method of deducing the different processes necessary to explain correlations between variables. These hypothetical dimensions, or explanatory constructs, are known as factors. The analysis yields an estimate of how much a variable is influenced by a given factor (the variable’s “loading” on the
factor). Loadings can vary from +1.00 to -1.00. A high loading (plus or minus) indicates a strong influence of the factor on the variable, while a loading near zero indicates little relationship. A plus loading means a direct relationship between factor and variable; a negative loading means an inverse relationship.

The factor analytic studies of depression have differed not only in types of subject populations and choices of variables measured but also in the choice of factor analytic model used and the decisions whether to rotate for solutions or not. The different models should cause relatively small differences between studies, but rotation leads to major differences in findings.

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<td>×</td>
<td>×</td>
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* Items not included in factor analysis but later correlated with factor.
ns = Correlation not reported but described as "not significant."
** Item (or factor) reflected to agree with direction of scoring or loadings in other studies.
× = Item not included in study.

_Amer. J. Psychiat. 124: 11, May 1968 Supp._
The Endogenous-Reactive Factor in Seven Studies

A discussion of all factors found in all factor analytic studies of depression is beyond the scope of this review. Here we are concentrating on the so-called endogenous-reactive factor. Some of the findings from seven studies (using the unrotated factors) in which the presence of this factor was claimed are presented in Table 1 (6, 15, 16, 20, 33, 41, 42), and the samples are described in Table 2.

Several studies (11, 14, 36, 53) were not included here because they did not interpret a factor as endogenous-reactive nor did the factors presented suggest such a possibility. Without exception these studies used rotation. Only one reported the unrotated factors as well (36); this study did not have enough comparability to the others in terms of the symptoms and traits studied.

Twenty-five historical, personality, or symptom items were included in at least four of the seven studies. Two studies were said to "agree" on an item if both showed either significant plus loadings, significant minus loadings, or insignificant loadings. Since factor loadings can be interpreted as correlations, significance was decided by what size correlation was needed for the .05 probability level, given the number of patients in the study.

The Consensus Across Studies

For the purpose of categorizing the results, the following definitions were set:

A. Perfect agreement. Items on which all studies were agreed in the direction and significance of an item's loadings were said to be in perfect agreement. Eight items met this criterion. Averaging the loadings across studies gave mean loadings in the .40 to .60 range for these characteristics. The directions of the loadings were such that the "endogenous" patient is characterized as being retarded, deeply depressed, lacking in reactivity to environmental changes, showing a loss of interest in life, and having visceral symptoms. Three other items with perfect agreement but with smaller average loadings (.30 to .40) would characterize the endogenous disorder as lacking a precipitating stress, having middle-of-the-night insomnia, and as not showing self-pity.

B. Fair agreement. This comprises items for which at least 75 percent of the studies agreed in the direction and significance of the loadings and the studies which did not agree were only minimally contradictory, i.e., they did not yield a significant loading in the opposite direction. Nine items were judged as showing fair agreement. They describe the endogenous depressive as being older, having a history of previous episodes, showing weight loss, having early morning awakening, showing self-reproach or guilt, and as not showing personality features suggestive of hysteria or inadequacy. Suicidal thoughts, threats, and/or attempts, when treated as one broad category, also characterized the endogenous factor. Diurnal variation of symptoms did not relate to this factor. Four out of four studies found a negative relationship between irritability and the endogenous factor, but the loadings were only significant for two studies (6, 20). The loading was large enough in a third (42)

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<th>CODE</th>
<th>INITIALS</th>
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<td>H. &amp; W.</td>
<td>Hamilton and White</td>
<td>49 male inpatients</td>
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<td>M. &amp; C.</td>
<td>Mendels and Cochrane</td>
<td>100 inpatients</td>
<td>ECT</td>
<td></td>
<td></td>
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<tr>
<td>C. R. &amp; G.</td>
<td>Carney, Roth, and Garside</td>
<td>129 inpatients; sex not mentioned</td>
<td>ECT</td>
<td></td>
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<tr>
<td>HO.</td>
<td>Hordern</td>
<td>137 female inpatients</td>
<td>ECT</td>
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</table>

to have been significant had the sample size been comparable to that in the other studies.

Two other items which showed perfect agreement in three studies should be noted. Perception of the depression as qualitatively different from ordinary sadness or downcast spirits and the absence of hysterical symptoms were both part of the endogenous factor.

C. Disagreement. Items which showed markedly different relationships to the endogenous factor in different studies were: obsessional personality, depression worse in the evening, agitation, hypochondriasis, variability of illness, and initial insomnia. Anxiety was handled differently by different researchers: three studies handled it as one broad variable while three rated somatic and psychic anxiety separately. Where both psychic and somatic anxiety ratings were made, the loadings were always in the same direction and fairly similar in size within the same study. Thus the same conclusion could probably be reached using either variable or by rating anxiety as one construct. The results with anxiety in different studies are clearly in disagreement. Two studies showed its presence to be typical of the endogenous factor, two showed a lack of anxiety for this factor, and two found no relationship.

The possible reasons for the disagreements between studies are multiple. The terms may mean different things to different raters; if different variables are given the same name, there is of course no reason why results should agree. The factor analytic results also may be distorted if the variables are differentially related to sex. For example, agitation and initial insomnia show clear positive loadings in the studies using only women (16, 41, 42) but not in those using men or both sexes (6, 15, 20, 33). Until more evidence is compiled it is most reasonable to withhold interpretation of the relationship of these items to the endogenous-reactive dimension.

This summary reveals an impressive amount of agreement between the factor analytic studies, the agreement being more impressive if the diversity of populations studied is considered.

Some other lines of evidence also attest to a consensus across studies. Rosenthal and Klerman (42) gave each of their patients a score on their factor and scores on the factors derived by other authors. Their factor scores correlated well with the Hamilton (15) factor scores (r.80) and with the Kiloh and Garside (20) factor scores (r.68). In addition, a significant correlation was found between the Kiloh (20) and the Hamilton scores (15) (r.60). The Rosenthal and Gudeman (41) factor scores correlated highly (r.90) with the Rosenthal and Klerman (42) scores and with those based on Hamilton's (15) factor (r.78).

Grinker and associates (14) applied a different strategy in the search for more comprehensive constructs. After rotating the factors and finding more restricted dimensions (i.e., "guilt," "projection"), they looked for clusters of patients with similar patterns of factor scores. One of the four patient patterns isolated showed feelings of hopelessness and low self-esteem, some guilt, isolation and withdrawal, apathy, slowing of speech and thought, and some cognitive disturbance. This pattern bears at least a superficial resemblance to the endogenous factor found in the unrotated studies. Also, one of Overall's (36) unrotated factors loaded most heavily on items related to depressed mood, retardation, and self-deprecatory content and seems to offer no contradiction to the factor discussed here.

The Factor and the Clinical Entity

Evidence that this factor does correspond to the clinical entity, as it is diagnosed by some clinicians, has also been presented. In two studies (6, 20) the loadings of items on the factor were correlated with a diagnosis of endogenous or reactive depression: e.g., it was asked whether the items showed similarity between how well they related to the factor (loading) and how well they related to diagnosis (correlation with diagnosis). The correlations were essentially perfect, being .99 in both cases.

This finding is impressive, but it raises a point of caution in regard to the design of these studies. A factor can theoretically explain the relationships between the scores on a set of rated traits or symptoms. How-
ever, it cannot discriminate whether the relationships exist in the patients or in the rating habits and perceptual system of the raters. Thus, given a factor which relates guilt and retardation, it may be that retarded patients do also have guilt feelings or it may be that the rater's preconceptions cause him more readily to perceive guilt from the patient once he has noted retardation, or even to work harder at eliciting an admission of guilt. Grinker and associates (14) controlled for this possibility by having their raters do "stereotypes," or ratings of hypothetical patients. These estimates of what the raters were "expecting" to find did not account for the factors obtained in the ratings of actual patients. However, a number of the studies discussed in this review did not pay sufficient attention to the problem of rater bias.

It seems clear that the possibility of rater's preconceptions molding results should be better controlled. This could be done by training special raters to recognize symptoms without conveying preconceptions about patterns of symptoms or by pre-testing raters and eliminating those with clear expectations about symptom patterns. Also, the inclusion of relatively objective measures and patients' self-ratings would be of value. Wittenborn and associates (53) incorporated this approach in their study but rotated to marked specificity of factors.

Significance of Factor Analytic Studies in Nosology

While there is considerable agreement among these studies that certain clinical items do tend to cluster, there is a difference of opinion about the significance of the factors. The factor we have considered here is often regarded as representing "endogenous depression." As we have already indicated, the term "endogenous" originally had specific etiological implications. Is there evidence from the factor analytic studies to support this? There is a significant relationship between the factor and an absence of precipitating stress (although our understanding of this term is very limited). Also, the lack of hysterical traits and/or inadequacy might testify to a healthier premorbid personality in these patients. The studies did not agree on the presence of the neurotic trait of obsessionality, however, and a global rating of premorbid personality did not relate to the factor in one study (41).

This review also did not reveal agreement on a relationship between the factor and a family history of depression, although a positive finding of this type has been reported (33). Also, Carney and associates (6) found that a family history of neurosis had a small but significant negative relationship to the endogenous factor, while there was a small but significant positive correlation between the factor and previous family history of endogenous disorder. There are thus some slight suggestions that endogenous depression as defined by the factor may be etiologically endogenous.

Alternative interpretations can be made, however. The question of whether the factor is measuring "severity" should be raised (although we are unsure about how to define "severity" of depression). With various types of severity estimates the studies disagreed in their findings. Rosenthal and Klerman (42) obtained a high correlation between a global rating of illness and the factor (r.66) and Rosenthal and Gudeman (41) mentioned a "high," but not specified, relationship of the same sort. However, Hordern's (16) factor did not clearly relate to a severity rating and Mendels and Cochrane (33) found no relationship between this factor and total Hamilton Depression Rating Scale scores.

Conclusion

It may be that the factor is simply measuring a pure or "classic" depression picture. Diagnosis is unsettled and many patients who fit the textbook descriptions in some regard also show additional features, supposedly characteristic of other disorders. The factor under discussion may indicate that in a large group of patients with depression there are a number who present with a fairly "pure" depressive picture, while in many others there are features of hysteria, character disorder (inadequacy),
anxiety, and other “nondepressive” characteristics.

Thus the so-called endogenous factor might represent the core of depressive symptomatology, whereas the clinical features of the reactive factor may represent phenomenological manifestations of psychiatric disorders other than depression which “contaminate” the depression syndrome. When depression is present in association with these other features, it might be regarded as just one of several symptoms.

REFERENCES
