The Psychological Mindedness Scale

Factor Structure and Relationship to Outcome of Psychotherapy

Hope R. Conte, Ph.D.
Rosemarie Ratto, Ph.D.
T. Byram Karasu, M.D.

Two studies are reported. The first examined the factor structure of the Psychological Mindedness (PM) Scale, and the second reassessed the scale's predictive validity. A principal components analysis (varimax rotation) of the data of 256 psychiatric outpatients produced five factors that accounted for 38% of the variance. A tentative definition of PM based on these factors is proposed. For a subsample of 116 patients who attended at least four psychotherapy sessions, PM was unrelated to levels of functioning and psychosocial symptoms at admission and was positively associated with number of sessions attended, consistent with findings of a preliminary investigation. Not replicated were significant correlations between PM and outcome measures derived from therapists' and an independent rater's evaluations. Initially high PM was significantly related to patients' self-ratings of symptoms and problems after discharge.


Psychological mindedness is broadly accepted by clinicians as an important and relevant attribute for patients treated in dynamically oriented psychotherapy. Because of the widespread belief that psychological mindedness is a prerequisite for a patient to benefit from this form of therapy, specific recommendations are routinely made on the basis of an individual's perceived capacity to be psychologically minded.

This complex concept may be intuitively understood by clinicians, but as it is used in the literature its definition is far from precise. For example, Appelbaum,1 focusing on the individual, describes it as “a person's ability to see relationships among [his] thoughts, feelings, and actions” (p. 36). McCallum and Piper,2 too, stress the understanding of individual dynamics, defining psychological mindedness as “the ability to identify dynamic (intrapsychic) components and to relate them to a person's difficulties” (p. 412). Farber3 sees psychological mindedness more as a disposition and explicitly considers “others” in his definition of psychological mindedness as “the disposition to reflect upon the meaning and

Received December 7, 1994; revised June 23, 1995; accepted July 6, 1995. From Albert Einstein College of Medicine/Montefiore Medical Center, Bronx, New York. Address correspondence to Dr. Conte, Department of Psychiatry, Bronx Municipal Hospital Center, Pelham Parkway and Eastchester Road, Bronx, NY 10461.

Copyright © 1996 American Psychiatric Press, Inc.
motivation of behavior, thoughts, and feelings of oneself and others" (p. 170). Hall, in contrast, characterizes the concept as both an ability and a disposition. Following her definition, individuals show psychological mindedness to the extent that they display an interest in and an ability to be reflective about psychological processes, relationships, and meanings across both affective and intellectual dimensions.

Much theoretical attention has been devoted to the concept of psychological mindedness. However, considering its importance, very few attempts have been made to use self-report instruments for its measurement. The most recent such attempt, the Psychological Mindedness (PM) Scale of Conte et al., assumes that this concept involves both self-understanding and an interest in the motivation and behavior of others.

In 1990, Conte et al. published preliminary data that showed the PM Scale to have good internal consistency (α = 0.86), and data obtained from a sample of psychiatric outpatients provided preliminary evidence for its predictive validity. Pretherapy total PM scores were found to be significantly correlated with the number of psychotherapy sessions attended, an increase in global functioning, and a decrease in psychosocial symptoms and problems.

The investigation by Bagby et al. of the psychometric properties of their scale for alexithymia provided evidence for construct (divergent) validity of the PM Scale. One would predict a negative relationship between alexithymia—which is characterized by Moore and Fine—as a state of "poorly differentiated and poorly verbalized affects that do not serve the signal function adequately (do not communicate effectively)" (p. 11)—and psychological mindedness. Such a relationship is what these investigators found, suggesting that the PM Scale is measuring the converse of the concept of alexithymia.

In a 1995 study by Conte et al., additional evidence for the construct validity of the PM Scale was provided when theoretically expected relationships were found between PM and a number of personality traits and between PM and measures of ego functioning. For example, there were significant positive correlations between PM and the personality traits of assertiveness and sociability (r = 0.57 and 0.40, P = 0.001 and 0.01, respectively) and significant negative relationships between PM and passivity (r = -0.59, P < 0.001), depression, and conflict (r = -0.34 and -0.30, P < 0.05). Similarly, high psychological mindedness was significantly associated with ego strength, mastery-competence, synthetic-integrative functioning (r = 0.58, 0.53, and 0.49, P < 0.001), and autonomous functioning (r = 0.29, P < 0.01). From a theoretical standpoint, all of these are variables that one would predict to be characteristic of psychologically minded individuals.

Although ample psychometric data are available for the PM Scale, to date the multiple facets of this obviously complex concept as measured by the PM Scale have not been systematically and empirically investigated. In addition, evidence of the scale's capacity to predict psychotherapy outcome is based on a relatively small sample. The purpose of the present investigation, therefore, was twofold. Study 1 was designed to investigate the factor structure of the PM Scale. Study 2 was designed to reassess, on a larger sample of psychiatric outpatients, 1) the scale's capacity to predict length of stay in treatment and 2) its predictive validity in terms of outcome measures that are based on the respective judgments of clinicians, of an independent rater, and of a subsample of the patients themselves.

**Study 1: Factor Structure of the PM Scale**

**Methods**

**Settings and Subjects**

At admission to a large clinic of a municipal hospital affiliated with a medical school, 256 psychiatric patients completed a self-report questionnaire designed to measure psy-
chological mindedness. There were 105 males (42%) and 145 females (58%) with a mean age (± SD) of 36.37 ± 11.13 years and a mean educational level of 12.18 ± 1.92 years. One hundred eighteen (47%) of the patients were single, 77 (31%) were married, 48 (19%) were divorced or separated, and 7 (3%) were widowed. The majority (62%) were Caucasian, 28% were African American, and 20% were Latin American. Diagnoses varied, with most patients diagnosed as having affective disorders (23%), followed by adjustment disorder (18%), schizophrenia (12%), and anxiety disorder (10%). The remaining patients were placed in an "Other" category, composed of such diagnoses as impulse disorder, dissociative disorder, somatization disorder, and V codes.

Test Instrument

Patients completed the 45-item Psychological Mindedness (PM) Scale, which represents a shortened version of Lotterman's 65-item scale designed to measure suitability for dynamically oriented psychotherapy (A. C. Lotterman, "A Questionnaire Measure of Psychological Mindedness and the Capacity to Benefit from Psychotherapy," © 1993, unpublished). Items are in a self-report format, scored on a 4-point scale ranging from "strongly agree" to "strongly disagree" and weighted 4, 3, 2, 1. Content validity was determined by asking five experienced clinicians to judge whether the items adequately covered a representative sample of the concept of PM as they understood it clinically and as it is described in the literature. All agreed that the 45 items reflected the concept of PM. They further agreed that, if endorsed, 24 of the items loaded positively for PM and 21 loaded negatively. In essence, the negative items described individuals who were not psychologically minded. Reverse scoring was used for these items. An individual's total score was obtained by summing the scores for all items. Preliminary data presented in 19906 suggested predictive validity for the PM Scale, and the previously mentioned 1995 study11 provided evidence for its construct validity. Data were collected by a research assistant at the time the outpatients registered at the clinic, before their evaluation by a therapist.

Results and Discussion

Coefficient alpha, previously reported for the PM Scale as +0.86,4 was recomputed from the data of the present study's 256 patients and again showed good internal consistency for this population (+0.87). In addition, test-retest reliability over a 2-week period for a subsample of 22 individuals was found to be 0.92.

The scores of the 256 patients on the PM Scale items were analyzed, using the principal components method with orthogonal (varimax) rotation of the axes. We used the option of inserting 1.0 for each communality (diagonal cell) of the correlation matrix, followed by the extraction of all factors that had eigenvalues greater than or equal to 1.0.12 This procedure resulted in the rotation of 14 factors that accounted for 63% of the variance. However, no factor after the fifth had more than two items whose factor loadings were 0.40 or greater. The first five factors accounted for 38% of the variance. Only items that loaded 0.40 or above on that factor were chosen to represent that factor. Table 1 presents these five factors, along with the two items that best characterize them and their respective factor loadings.

All 10 items of Factor 1 (Willingness to Try to Understand Oneself and Others), typified by its highest loading item, "I frequently don't want to delve too deeply into what I'm feeling," were reverse scored. Of the five items of Factor 2 (Openness to New Ideas and Capacity for Change), the item best representing this factor is "At work, if someone suggested a different way of doing a job that might be better, I'd give it a try." Of the five items of Factor 3 (Access to One's Feelings), three are reverse scored (e.g., "Often, even though I know I'm having an emotion, I don't know what it is"), and two are scored positively.
(e.g., “I’m usually in touch with my feelings”). The three items of Factor 4 (Belief in the Benefits of Discussing One’s Problems), characterized by its highest-loading item, “Talking about your worries to another person helps you to understand your problems better,” were scored positively. All items of Factor 5 (Interest in Meaning and Motivation of Own and Others’ Behavior) are scored positively. Most characteristic of this factor is the item “I often find myself thinking about what made me act in a certain way.”

Only 27 of the 45 items of the PM Scale are accounted for by this factor structure, with item-total correlations ranging from 0.06 to 0.52 with a mean of 0.35, indicating that they all contribute to the overall concept of psychological mindedness without being redundant. It would be premature, however, to revise or shorten the scale on the basis of these data alone, as the remaining 18 items had item-total correlations that ranged from 0.01 to 0.44, with a mean of 0.20. Additional data are needed to determine if this factor structure and the items contributing to it remain stable.

The factors identified in this analysis add additional facets, such as willingness to discuss one’s problems with others, openness to new ideas, and a capacity for change, to the concept of psychological mindedness as previously defined. Nevertheless, they are compatible with previous conceptual definitions. That is, they reflect Appelbaum’s notion of PM as a process of insight that allows an individual to see how thoughts, feelings, and actions are interrelated and Farber’s view of it as interest in the motivation and meaning of one’s own and others’ behavior, thoughts, and feelings. It is

---

**TABLE 1. Five factors of the Psychological Mindedness Scale and sample items (N= 256)**

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor 1 (Willingness to Try to Understand Oneself and Others)</strong></td>
<td></td>
</tr>
<tr>
<td>I frequently don’t want to delve too deeply into what I’m feeling.</td>
<td>0.66 0.14 0.23 0.07 0.04</td>
</tr>
<tr>
<td>It would be very difficult for me to discuss upsetting or embarrassing aspects of my personal life with people even if I trust them.</td>
<td>0.63 -0.01 0.14 0.06 -0.07</td>
</tr>
<tr>
<td><strong>Factor 2 (Openness to New Ideas and Capacity for Change)</strong></td>
<td></td>
</tr>
<tr>
<td>At work, if someone suggested a different way of doing a job that might be better, I’d give it a try.</td>
<td>0.17 0.65 0.16 0.24 0.07</td>
</tr>
<tr>
<td>It is important to be open and honest when you talk about your troubles with someone you trust.</td>
<td>0.11 0.52 0.06 0.26 0.12</td>
</tr>
<tr>
<td><strong>Factor 3 (Access to One’s Feelings)</strong></td>
<td></td>
</tr>
<tr>
<td>Often, even though I know that I’m having an emotion, I don’t know what it is.</td>
<td>0.16 0.21 0.73 -0.14 -0.13</td>
</tr>
<tr>
<td>I’m usually in touch with my feelings.</td>
<td>0.02 0.27 0.54 0.21 0.02</td>
</tr>
<tr>
<td><strong>Factor 4 (Belief in the Benefits of Discussing One’s Problems)</strong></td>
<td></td>
</tr>
<tr>
<td>Talking about your worries to another person helps you to understand your problems better.</td>
<td>0.09 0.03 0.07 0.82 0.00</td>
</tr>
<tr>
<td>I’ve found that when I talk about my problems to someone else, I come up with ways to solve them that I hadn’t thought of before.</td>
<td>0.06 0.30 0.01 0.68 0.04</td>
</tr>
<tr>
<td><strong>Factor 5 (Interest in Meaning and Motivation of Own and Others’ Behavior)</strong></td>
<td></td>
</tr>
<tr>
<td>I often find myself thinking about what made me act in a certain way.</td>
<td>-0.18 -0.02 -0.12 -0.02 0.75</td>
</tr>
<tr>
<td>I am always curious about the reasons people behave as they do.</td>
<td>0.09 0.29 -0.17 0.04 0.63</td>
</tr>
</tbody>
</table>
also compatible with Hall's' more recent conceptual model that defines psychological mindedness in terms of an interest in and an ability to develop understanding of psychological processes. On the basis of the present study, we propose the following tentative definition of psychological mindedness: "PM is an attribute of an individual that presupposes a degree of access to one's feelings, a willingness to try to understand oneself and others, a belief in the benefit of discussing one's problems, an interest in the meaning and motivation of one's own and others' thoughts, feelings, and behavior, and a capacity for change."

**Study 2: Relationship of PM to Outcome of Psychotherapy**

**METHODS**

**Setting and Subjects**

Of the 256 psychiatric patients admitted to the municipal hospital outpatient clinic who completed the PM Scale at admission in Study 1, 116 attended at least four sessions of psychotherapy before being discharged over a 4-year period. Four sessions was chosen as the cutoff point for considering a patient to have been in psychotherapy. Ninety-six of the 256 patients were referred out of the clinic or dropped out after the initial evaluation or before completing four therapy sessions. In this study, the PM data from the subsample of 116 who attended at least four sessions were compared with outcome measures. Demographically, diagnostically, and on mean PM score, these patients did not differ significantly from either the 44 patients described in the earlier study (not included in the present sample) or the 96 patients who were referred out or dropped out of therapy prior to four therapy sessions.

Forty-four (38%) of the patients were male, and 72 (62%) were female. Together they had an average (± SD) of 12.44 ± 2.09 years of education. Sixty-one percent were Caucasian, 19% were African American, and 20% were Latin American, with an average age of 35.61 ± 10.40 and a mean of 12.44 ± 2.07 years of education. All were from largely middle to lower middle class populations. Forty-six percent were single, 30% were married, 19% were separated or divorced, and 3% were widowed. All patients were diagnosed by the evaluating clinician using DSM-III-R criteria. The majority (27%) were diagnosed as having affective disorders, 24% adjustment disorder, 12% schizophrenia, and 11% anxiety disorders. As was the case with the total sample of 256 patients, the remaining patients (26%) were combined in an "Other" category consisting of a number of less frequently assigned diagnoses. The 116 patients in this study attended a mean of 22.61 ± 30.16 sessions (range 4–224).

**Psychiatric Treatments and Therapists**

The outpatient clinic provides a variety of psychotherapies, including supportive and insight-oriented psychotherapy, group psychotherapy, family and marital therapy, and medication. Patients may receive one or more modalities of treatment either sequentially or concomitantly. Almost all patients in this study received individual therapy (92%), with the other 8% receiving either group or group plus individual treatment. Fifty-four percent were also receiving at least one type of medication, including antidepressants, anxiolytics, and neuroleptics; 18% received more than one type of medication.

Treatment was provided mainly by third-year psychiatric residents. Treatment was also provided by social workers, social work students, and psychology interns. All therapists were supervised by senior faculty members, whose orientation is broadly psychodynamic. None of the therapists were aware that patients' clinical records would serve as a basis for a retrospective research study.

**Test Instruments**

The 45-item Psychological Mindedness (PM) Scale, completed by patients at admis-
sion to the clinic, is described above under Study 1.

The Global Assessment Scale (GAS) was used to determine the degree of change in level of functioning over the course of treatment. A patient receives a numerical rating from 1 to 100 depending on his/her level of functioning. The higher the score, the better the patient's level of functioning. For example, a score of 40 indicates some impairment in reality testing or communication or a major impairment at work or school. A rating of 70 represents only mild symptoms and a relatively high level of functioning. An independent rater made pretreatment and posttreatment GAS ratings on the basis of intake evaluations and discharge summaries from the charts. Satisfactory interrater reliability has been established for this population (0.77).

The Psychiatric Outpatient Rating Scale (PORS) provided data regarding symptoms and problem changes. The PORS is a 21-item symptom rating scale developed for use in outpatient clinics. Each of the 21 symptoms is rated on a 5-point scale ranging from 0 (not present) to 1 (minimal problem), 2 (moderate problem), 3 (severe problem), or 4 (very severe problem). A total score is obtained. The higher the score, the more symptomatic the patient. Patients were rated on the PORS by the evaluating clinician at intake and again by the treating therapist at discharge. The PORS has been found to have good internal consistency (α = 0.84) and interjudge agreement (0.74). The PORS also correlated −0.64 with the GAS (P < 0.001), indicating a degree of concurrent validity.

The Self-Report Symptoms and Problems Questionnaire (SRPQ) consisted of 24 frequently encountered symptoms or problems such as anxious feelings, panic, depression, shyness, irritability, suspicion, sleep problems, loneliness, lack of enjoyment of life, suicidal feelings, problems in getting along with people, and problems with alcohol and drugs. This instrument was used in a previous survey of recently discharged patients. For each of the problems that they had experienced prior to therapy, patients were asked to indicate on a 5-point scale whether they experienced more or less of the problem at discharge or whether there had been no change. A total score was obtained that represented the patient's rating of symptomatic improvement. The lower the score, the greater the improvement.

Item 25 on the questionnaire asked patients to rate how much they believed they were helped at the clinic, on a 4-point scale ranging from "a great deal" to "not at all." This response represented a patient's subjective global rating of improvement in therapy. Item 26 asked patients to rate their satisfaction with their therapists on a 4-point scale ranging from "very satisfied" to "not at all satisfied." The 116 patients were mailed this questionnaire along with a cover letter and a stamped, self-addressed envelope at the time of their discharge.

**Results and Discussion**

The major purpose of Study 2 was to determine whether the relationships between PM at admission and outcome measures that were previously found with a relatively small sample would replicate. Table 2 presents the correlations found in the present study.

Once again, the correlations between total PM Scores and initial GAS and PORS measures indicated that PM was basically unrelated to patients' level of functioning and psychiatric symptoms and problems at admission to the clinic. Also as in the original study, a high level of PM (measured at intake) was significantly and positively correlated with number of therapy sessions attended (r = 0.25, P < 0.01). There was, however, no significant relationship between PM scores of all patients referred for psychotherapy (n = 212), regardless of whether or not they came to the clinic for more than evaluation, and number of therapy sessions actually attended (r = 0.12, not significant). Interestingly, there was no significant difference between the mean PM score of
the 116 patients who attended four or more sessions (130.91 ± 13.32) and the mean score of the 96 who dropped out prior to four sessions (130.47 ± 14.87; t = 0.20, P < 0.84). This finding, plus the fact that the correlation indicates that PM accounted for only 6% of the variance, suggests the possibility that PM may help to cement a therapeutic relationship once it is established, but that it is not sufficient for the creation of such a relationship.

The lack of significant relations between GAS and PORS residual change scores and PM replicated the findings of the 1990 study (r = 0.18 and -0.18, respectively). However, where the earlier study found PM to be significantly related to high levels of functioning (GAS) and to low levels of symptoms and problems (PORS) at discharge, the present results showed no significant correlations between PM and these measures. Analyses designed to determine whether predictive relationships existed between GAS and PORS discharge scores and high and low PM scores at admission (one standard deviation above and one standard deviation below the mean) also failed to show significant results. Thus, although the prediction of a significant

### TABLE 2. Correlations between Psychological Mindedness Scale scores and measures of outcome

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>Correlation With PM Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sessions attended</td>
<td>116</td>
<td>0.25*</td>
</tr>
<tr>
<td>GAS (admission)</td>
<td>116</td>
<td>0.03</td>
</tr>
<tr>
<td>PORS (admission)</td>
<td>116</td>
<td>0.01</td>
</tr>
<tr>
<td>GAS (discharge)</td>
<td>109</td>
<td>0.01</td>
</tr>
<tr>
<td>PORS (discharge)</td>
<td>94</td>
<td>0.06</td>
</tr>
<tr>
<td>GAS (residual change)</td>
<td>109</td>
<td>0.09</td>
</tr>
<tr>
<td>PORS (residual change)</td>
<td>94</td>
<td>-0.05</td>
</tr>
<tr>
<td>SRPQ</td>
<td>42</td>
<td>-0.32*</td>
</tr>
</tbody>
</table>

Note: The negative correlations are due to the fact that low scores on the SRPQ reflect few psychosocial problems, whereas high scores on the PM Scale indicate high PM. PM = psychological mindedness; GAS = Global Assessment Scale; PORS = Psychiatric Outpatient Rating Scale; SRPQ = Self-Report Symptoms and Problems Questionnaire. *P < 0.01; †P < 0.05.

A positive relationship between having high PM at admission and remaining in therapy was borne out, findings with regard to the other two outcome measures (high levels of functioning and low levels of symptoms) did not replicate.

Neither the literature nor clinical experience suggested an interaction between diagnosis and PM in relation to outcome. Nevertheless, because of the possibility that PM might not have the same meaning or predictive powers with patients diagnosed as schizophrenic, an additional analysis was conducted. The 14 patients with this diagnosis were removed, and correlations between PM and the outcome measures were calculated for the remaining patients in the sample. The results remained essentially the same. PM still correlated significantly with number of sessions attended, but not with the other outcome measures.

Although PM was unrelated to measures of outcome from the therapists’ and independent rater’s points of view in this study, a relationship was found with self-ratings of outcome by the 42 patients who returned their SRPQ survey. These patients’ PM scores were significantly correlated with their assessment of the extent of their psychosocial symptoms subsequent to termination of treatment (items 1–24; r = -0.32, P < 0.05). In addition, these self-ratings of symptomatology subsequent to discharge were significantly correlated with patients’ global ratings of improvement in therapy (item 25 of the SRPQ) (r = -0.31, P < 0.05). There was also some evidence that these global ratings of improvement were related to ratings of satisfaction with therapists (item 26; r = -0.27, P < 0.10).

Admittedly, this subsample is small. However, the mean PM score for the 42 patients did not differ significantly from that of the 74 who did not return their surveys (132.00 ± 15.45 vs. 131.65 ± 11.71; t = 0.13, not significant). These findings suggest, therefore, that patients who described themselves as more psychologically minded, and who thus presumably had a certain degree of insight and
motivation to understand their feelings and behavior, perceived greater benefit from psychotherapy, even though the relationship between patient-rated PM and outcome was not found when outcome ratings came from other sources.

The correlations between the PM factor scores obtained by the subjects and their scores on the outcome indices were almost identical to the correlations between their total PM scores and their scores on the outcome indices (shown in Table 2). The Total Factor Score, obtained by summing the scores on the 27 items that loaded 0.40 or greater on one of the five factors, correlated +0.22 (P < 0.05) with number of sessions attended and −0.30 (P < 0.05) with patients’ assessments of their symptomatology subsequent to discharge. It might be noted that this latter outcome measure was equally well predicted by the 10 items of Factor 1 (r = −0.33, P < 0.05).

The self-rated SRPQ was not used as an outcome measure in the original study, so no comparisons between that study and this can be made on this measure. The findings on measures that were used in both investigations are only partially consistent in terms of PM’s predictive ability. The data of the present study support the notion that, regardless of initial symptomatology, PM tends to be associated with more time spent in treatment. Its relationships to outcome measures provided by the independent rater and the therapists were not replicated. These findings are, however, consistent with those of McCallum and Piper, who found that PM was predictive of remaining in therapy, but who failed to find significant direct relationships between PM and a large battery of outcome indices.

Perhaps PM has no direct relation to outcome and is, in fact, an intervening variable between predictors and outcome. The idea that PM and ego functions are all part of a multifaceted concept that deals with adaptive functioning and that PM could, therefore, be thought of as an additional aspect of ego functioning has been suggested before. If this notion is credible, perhaps psychological mindedness facilitates remaining in therapy and enables the patient to become emotionally attuned to changes in his or her intrapsychic or interpersonal functioning that might not necessarily be detected by others. In this sense, this self-report measure may be a more sensitive index of outcome of dynamically oriented psychotherapy than measures based on ratings made by others.

A number of limitations of both Study 1 and Study 2 should be noted. First, although the number of subjects is relatively large, the ratio of subjects to items in the principal components analysis of Study 1 is five to one. Also, the factor structure proposed accounts for only 38% of the variance. Replication, preferably with a larger number of subjects, will be necessary before stability can be claimed either for the factors found or the items defining them. Replication will also be needed before an attempt can be made to revise and shorten the scale. Thus, the definition of PM offered on the basis of the findings in the present study must be considered tentative.

Second, in Study 2, although individual psychodynamically oriented therapy was the predominant mode of treatment offered, it was not controlled or manual-driven. Depending on the nature and degree of a patient’s psychopathology, the treatment process could contain more or less supportive or insight-oriented components. Nevertheless, one would expect PM to serve as a positive element in the therapeutic process.

A third possible limitation concerns the outcome measures that were used. An attempt was made to obtain outcome data from as many perspectives as possible, in this case from the therapists, from an independent judge, and from the patients themselves. However, the independent judge’s ratings were based on material contained in the patients’ charts and could be no more informed or accurate than was that material. The amount of information obtained from the patients themselves was also somewhat compromised because only about one-third returned their
surveys. In future studies we will attempt to have patients complete these surveys at the time of their last visit to the clinic to avoid relying on patients' completing and returning mailed surveys.

**Summary**

This investigation was designed to determine the factor structure of the PM Scale and to further assess the scale's ability to predict indices of outcome of psychotherapy.

In Study 1, based on the data of 256 psychiatric outpatients, a principal components factor analysis with varimax rotation identified five factors that accounted for 38% of the variance. These five factors were composed of 27 items, all of which loaded +0.40 or greater on any one factor and close to zero on the others. Based on the factors that were identified, the following definition of psychological mindedness was tentatively proposed: "PM is an attribute of an individual that presupposes a degree of access to one's feelings, a willingness to try to understand oneself and others, a belief in the benefit of discussing one's problems, an interest in the meaning and motivation of one's own and others' thoughts, feelings, and behavior, and a capacity for change."

Study 2 only partially replicated the preliminary findings of the earlier investigation. Previous findings showing PM to be unrelated to patients' level of functioning (GAS) and psychiatric symptoms and problems (PORS) at intake to the clinic were confirmed for a subsample of 116 patients who attended at least four sessions of psychotherapy. Also confirmed was the finding of a positive association between a high level of PM at admission and the number of therapy sessions attended. The original findings that high PM scores at admission predicted high levels of functioning and low levels of symptomatology at discharge did not replicate with the larger sample. There was, however, a significant relationship between initially high PM and patients' self-ratings of symptoms and problems subsequent to discharge (SRPQ). It was noted that patients who perceived themselves as high on psychological mindedness, as defined by the PM Scale, also tended to perceive themselves as having received greater benefit from psychotherapy than that noted by either a therapist or an independent rater. Additional research is needed to determine the replicability of this finding. It would also be interesting to explore the extent to which PM is related to other variables, such as transference and the therapeutic alliance, that have been considered to be mediating variables or intervening factors between predictors and outcome.

**References**

traits and ego functioning: validity studies. Compr Psychiatry 1995; 36:11-17