

Gordon, R. M. (2001). MMPI/MMPI-2 changes in long-term psychoanalytic psychotherapy. *Issues in Psychoanalytic Psychology, 23*(1–2), 59–79.

MMPI/MMPI-2 Changes in Long-Term Psychoanalytic Psychotherapy

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Abstract

The MMPI/MMPI-2, the most used and validated test of psychopathology, reacts poorly to “Empirically Supported Treatments”, which are usually less than 20 sessions. The MMPI/MMPI-2 was tested with large dose therapy (long-term psychoanalytic psychotherapy) with 55 polysymptomatic outpatients. After $M = 38.8$ months ($SD = 17.1$) of treatment, scales F, Hs, D, Hy, Pd, Pt, Sc, Ma, and A, all significantly decreased to the normal range; most were $p < .001$. Scales K and Es which measure ego strength, increased significantly (both $p < .001$). A subsample of 18 patients with 3 testings, showed little change at $M = 24.9$ months ($SD = 17$). However, most of the scales changed significantly by $M = 60.4$ months ($SD = 32$; most $p < .001$). On the average, it took patients about 2 years to begin to make significant changes to their personalities, and they continued to improve for years. These results, using the MMPI/MMPI-2, support the validity of long-term psychotherapy.

MMPI/MMPI-2 Changes in Long-Term Psychoanalytic Psychotherapy

I have noticed in my work with patients in long-term psychoanalytic psychotherapy, that the MMPI and the newer form, the MMPI-2 (MMPI/MMPI-2) showed profound changes to personality through out the years of treatment. The MMPI/MMPI-2 changes support the belief that the maturation of personality is only achieved from years of effective treatment, and that brief treatment does not reach deeper levels of personality measured by that test.

However, the MMPI/MMPI-2 is rarely used to assess change in psychotherapy, since the MMPI's scales tend to measure enduring personality traits, and most outcome studies involve short-term therapy. The MMPI/MMPI-2 is not likely to show significant changes in deep personality traits in treatment that lasts only ten to twenty sessions. For example, Smith and Glass (1977) in their meta-analysis of 475 psychotherapy outcome studies looked at the connection between outcome measures and change. They concluded that the MMPI had a minimal connection with the treatment or the therapist and had low reactivity to the treatment. They found the degree of reactivity of the MMPI was low, similar to G.S.R., blind ratings and grade point average (.55-.60). Client's self report and therapist's ratings were the highest reactive measures (.92-1.19). The average duration of therapy for the 475 outcome studies was only 15.75 hours. McNair (1974) found that the MMPI Depression scale detected differences between a placebo drug group and the anti-depressant drug group

only 17% of the time. The Beck Depression Inventory had a 29% detection rate. When Beck was developing his cognitive-behavior therapy for depression, he found that the MMPI Depression scale was not reactive to his treatment. He then developed his Beck Depression Inventory, which was very reactive to his short-term treatment of depression (Beck, Ward, Mendelsohn, Mock, & Erbaugh, 1961). The MMPI Depression scale was developed with a criterion group most of whom were in the depressed phase of a bipolar disorder (Hathaway & McKinley, 1942). The items on that scale, as well as the other MMPI/MMPI-2 clinical scales, are associated with deep and complex psychopathology.

The MMPI/MMPI-2 has not been very reactive as an outcome measure. This may be for several reasons. 1) Most the scales are based on enduring and complex personality traits, verses symptom states commonly found in adjustment disorders, or specific anxiety disorders. 2) The scales are stable for years. 3) The MMPI/MMPI-2 is probably reactive to changes in psychotherapy, but is not reacting to the superficiality of the very brief treatments common to outcome research.

Stability of the MMPI/MMPI-2

The MMPI, and the MMPI-2's is the most used and validated test of psychopathology in our field (Graham, 1999). MMPI scores are fairly stable over a period of years. The Si scale was found to be the most stable with a retest correlation of .74, after a 30-year period (Leon, Gillum, Gillum, & Gouze, 1979). After 5 years, 1072 men showed high stability on their scores (Spiro III, 2000).

Test-retest correlations for the clinical scales averaged .66. Scales Si (.85), Pt (.83) and A (.86) were highly stable, and Pa (.55) was the least stable clinical scale.

The MMPI/MMPI-2 does not seem significantly affected by repeated administrations, nor do high scores seem to regress to the mean. Dahlstrom, Welsh and Dahlstrom (1975) concluded that "...repeated administrations of the MMPI do not in and of themselves generate scores that are regressive toward the general adult means...higher ranging profiles were generally the most consistent..." (p.177). Fiske (1957) found greater stability for the more extreme scores after 9 to 18 retestings on the MMPI. Subotnik (1972) also did not find a regression toward the mean with deviant MMPI profiles after 9, 21, and 33 months, with students who had psychiatric problems and were untreated. Since the MMPI/MMPI-2 is measuring enduring personality traits, it follows that there should not be a regression to the mean over time.

There is very little outcome research on what is common in private practice psychotherapy, i.e. years of treatment with polysymptomatic patients with personality disorders. Psychotherapy that lasts for years is very difficult to study in the field. For example, placebo or no treatment control groups and randomizing patients to treatments would be grossly unethical and would constitute malpractice. One way to objectively study personality changes in long-term therapy in a private practice setting is to use the MMPI/MMPI-2 pre-test as a control in test- retest outcome research. The MMPI/MMPI-2 does not show a tendency for a regression toward the mean, or spontaneous remission and the

scores are stable for years. Using the MMPI/MMPI-2 as it's own control can allow for an empirical assessment of long-term psychotherapy in an ecologically valid setting, such as an independent practice. However, research with the MMPI/MMPI-2 as an outcome measure is waning (Hollon & Mandell, 1979), as is research on long-term psychotherapy (O'Donohue, Buchanan, & Fisher, 2000; Stevens, Hynan, & Allen, 2000).

Brief therapy is easier and more frequently researched than long-term psychotherapy, but the conclusions are often not generalizable to actual practice. A meta-analysis of 30 years of research indicated that by 8 sessions about 50% of the patients improved in symptoms. Beyond brief treatment, there appeared to be diminishing returns (Howard, Davidson, O'Mahoney, Orlinsky, & Brown, 1989; Howard, Kopta, Krause, & Orlinsky, 1986; Howard, Moras, Brill, Martinovich, & Lutz, 1996). A survey of the characteristics of Empirically Supported Treatments (ESTs) identified by the American Psychological Association Division 12 Task Force on the Promotion and Dissemination of Psychological Procedures found that ESTs focus on a specific symptom involving brief treatment contact, requiring 20 or fewer sessions. Traditional assessment methods, such as intelligence testing, projectives, and objective personality tests such as the MMPI-2, that go beyond the mere measurement of just symptoms, are rarely used to evaluate these treatments (O'Donohue et al., 2000). In a recent meta-analysis of 80 outcome studies, 79% were treatments of less than 10 sessions. The authors concluded that treatments should be at least 16-20 sessions to

effectively study dose effectiveness. They also advise the use of uniform measures of proven reliability, such as the MMPI-2 (Stevens et al., 2000).

ESTs give priority to internal validity at the cost of external validity (Campbell & Stanley, 1963; Cronbach, Ambron, Dornbusch, Hess, Hornik, Phillips, Walker, and Weiner, 1980; Seligman, 1996; Westen, 2000). Clinical psychology is in danger of becoming the science of brief treatments for specific symptoms, and disenfranchising much of the psychotherapy practiced by successful private practitioners. Seligman (1996) found different results going outside the laboratory's typical short-term studies, by actually surveying 2,900 respondents who saw a mental health professional in the previous three years. He found that satisfaction with therapy was the greatest for those who were in treatment for two or more years. Weston's meta-analysis (2000) put doubt in the value of short-term therapy for reoccurring disorders and polysymptomatic patients. He also argued that an allegiance effect accounted for 69% of the variance in ESTs. Kordy, von Rad, and Senf, (1989) assessed neurotic and psychosomatic patients in long-term psychoanalytically oriented treatment. They found within the dose-effect model that about 2.5 years was most beneficial for patients overall, and about 3.5 years for the psychosomatic patients who stayed in treatment at least that amount of time. Weiner and Exner (1991) used the Rorschach as an outcome measure with outpatients in long-term dynamically oriented psychotherapy (in treatment 2-3 times a week for about 46-50 months), and with outpatients in short-term behavioral or gestalt therapy (in treatment about once a week, and no patient in treatment for more than 16 months). They

found that after the first year of treatment there was some progress in both groups. They retested all the patients again after about 2.5 and 4 years after the start of treatment. The patients who stayed in the long-term psychodynamic therapy showed the greatest effects to their personality after about 2.5 years, and the changes continued into the fourth year of the study. The changes were extensive and profound. There were few changes in personality in the short-term group.

Most the research on polysymptomatic patients and patients with personality disorders find that they require long-term psychotherapy. Psychoanalytic psychotherapy is aimed at personality structure, and therefore often effective for disorders of personality (Altshuler, 1990; Beatson, 1995; Blatt, 1998; Chessick, 1982; Eckert, Biermann-Ratjen, & Wuchner, 2000; Endicott & Endicott, 1964; Goldberg, 1989; Hall, 1977; Hoglend, 1993, 1996; Kantrowitz, Katz, & Paolitto, 1990; "Treatment outlines for avoidant, dependent and passive-aggressive personality disorders. The Quality Assurance Project," 1991; "Treatment outlines for borderline, narcissistic and histrionic personality disorders. The Quality Assurance Project," 1991; "Treatment outlines for paranoid, schizotypal and schizoid personality disorders. The Quality Assurance Project," 1990).

Since the MMPI/MMPI-2 has not been very supportive of treatment effectiveness, it has fallen out of favor as an outcome instrument. None of the current textbooks on the MMPI-2 now include a section or chapter concerning the use of the MMPI-2 as a pre and post outcome measure in psychotherapy

(Butcher, 2000; Duckworth & Anderson, 1995; Friedman, Lewak, Nichols, & Webb, 2000; Graham, 2000; Greene, 1991). Hollon, and Mandell's (1979) review of the MMPI as a pre-post outcome measure, perhaps the last such review, concluded:

On the whole, such data as do exist appear to be mildly supportive of the MMPI as a valid measure of change in these populations (mixed outpatient). Although the rate of outcome research has not declined, the percentage of studies reported utilizing the MMPI has clearly dropped over the years. (p.273)

This research hopes to change this situation by demonstrating that: 1) the MMPI/MMPI-2 has accurately been measuring the weakness of brief treatments, and 2) the MMPI/MMPI-2 is reactive to long-term psychoanalytic psychotherapy.

Hypotheses

1. The MMPI/MMPI-2 should be significantly reactive to personality changes in long-term psychoanalytic psychotherapy. The scales assessing psychopathology, (F, Hs, D, Hy, Pd, Pa, Pt, Sc, Ma, Si, and A), should decrease after years of treatment. The K and Ego strength scales, both measuring psychological maturity, should increase after years of treatment.

2. The MMPI/MMPI-2 is not expected to react reliably to short-term treatment. The changes in personality as measured by the MMPI/MMPI-2 scales should be curvilinear, or at least show continuous change over years of treatment. That is, it was expected that it would be a matter of years before

personality traits would reliably change. This is the opposite hypothesis of diminishing returns after the first few months of treatment.

Method

Archival Retrieval

I am unaware of another psychoanalytic practitioner who gives his or her patients, on a regular basis, the MMPI/MMPI-2 at the beginning of treatment, sometimes during, and at the end of treatment. I have been doing this for almost 20 years. This data has allowed me to help my patients to objectively assess their changes, outside of my perceptions and their transferences. I give it to almost every patient. I do not give it to patients who clearly do not want psychotherapy, but only wish a brief consultation, or brief counseling. As with any intervention, timing and empathy determines when I give the MMPI/MMPI-2. Most patients welcome the objective evaluation, and consider it part of their health care assessment. I have found that the patients' reactions to the test and the results are analyzable and valuable. I have found the results valuable for both diagnostic and treatment progress purposes.

The MMPI/MMPI-2 has also provided me with data to test the reactivity of the MMPI/MMPI-2, with large dose therapy. My archival field study is a practical way to do ecologically valid research on patients who are in therapy for many years.

A psychology intern took all the MMPIs or MMPI-2s from retired patient files according to the following criteria:

1. The patient must have had at least beginning and end of treatment MMPIs.

Consistent with most findings, many patients were in treatment for less than one year, and did not have a second MMPI or MMPI-2. I typically do not give a second MMPI or MMPI-2 until at least after one year of therapy. Patients before 1995 took the MMPI, and there after took the MMPI-2.

2. At least one main clinical scale had to be significantly elevated at the beginning of treatment. The psychopathology had to be detectable by the MMPI or MMPI-2. Some patients had issues not assessed by the MMPI/MMPI-2 and therefore could not be included in the study, i.e. child problems, adjustment disorders, etc. This criterion eliminated from the study some patients with ego-syntonic pathology and some high functioning patients with mild problems.

Patient Characteristics

Fifty-five polysymptomatic outpatients (F=27, M= 28) met the above criteria. The average age was 38 years old (SD=10). Eighty-two percent were college educated. The average high point code was 2-4 (Depression and Psychopathic deviate), indicating the sample's problems with affect and relationships. The average duration in treatment was about 3 years (38.8 months, SD =17.1). The typical chief complaints were: relationship problems (53%), depression (35%), and anxiety (24%). (The percentages do not add up to 100% because of the multiple complaints and diagnoses.). The most common DSM Axis I diagnoses were: Dysthymia 36%, Anxiety disorder 25%, Major Depression 22%, and Somatoform disorder 11%. The most common Axis II diagnoses were: Borderline 27%, Narcissistic 25%, Histrionic 11%, Obsessive- Compulsive 11%,

Paranoid 7%, and Dependent 7%. Ninety-three percent of the sample had some degree of personality disorder. Excluded from the study were individuals with psychotic disorders, substance abuse disorders (as a primary diagnosis) and psychopathic personalities. This population is typical of outpatients in psychoanalytic treatment. They are bright, motivated, depressed, and anxious, and have had long-term problems with relationships.

A subset of 18 patients (F=8, M=10) took the MMPI or MMPI-2 at the beginning of treatment, during the course of their treatment and at the end of their treatment. The average length of treatment was about 5 years (60.4 months, SD= 32 months). The average time between the first and second testing was about 2 years (24.9 months, SD= 17 months). This analysis helped to better understand when the changes to personality occurred. All the patients were in psychoanalytic psychotherapy at least once a week. Thirty-six percent were in treatment twice a week.

Data Analysis

I used non-K corrected raw scores in the data analysis so that both the MMPI and MMPI-2 data could be pooled, and to avoid the confounding problems with K. K can contribute to error variance in a test-retest outcome study. A low K is associated with psychopathology as can be a high K. But a high K by the end of treatment can mean good ego strength. The Masculinity-femininity (Mf) scale was not used in this study, since the Mf scale is scored in opposite directions for males and females, and its interpretation is curvilinear. Both high and low scores connote psychopathology. The Mf scale for males and females could not be

pooled, as the other scales. Due to the low N and little gender differences (see results section), gender data was pooled, and a p value of $<.01$ was used.

Fisher's exact test for data with small samples, and the Scheffe Post Hoc test were used for data analysis.

Results

After about an average of 3 years (38.8 months, $SD=17.1$) of psychoanalytic psychotherapy, scales F, Hs, D, Hy, Pd, Pt, Sc, Ma, Si, and A, all showed highly significant decreases in psychopathology; most were $p<.001$. Most of the scales went from the pathological level at the beginning of treatment to the normal level at the end of treatment. Scales K and Es significantly increased to higher levels of mature functioning (both $p<.001$). (See Table 1 and Figure 1. The tables are in non-K corrected raw scores, and the graphs are in K corrected T scores using MMPI-2 norms.). Hypothesis #1 was strongly supported by the data. Of the 13 predicted MMPI/MMPI-2 scales, only one did not change as predicted, Pa ($p=.32$. Although women did improve in this scale, $p<.001$; see below). Scale A, the first factor scale of the MMPI/MMPI-2 items, is a very stable scale and a good measure of overall psychopathology. Scale A decreased by 50.3%. The F scale, another measure of overall psychopathology, decreased by 42.3%. The MMPI/MMPI-2 proved to be very reactive to changes in long-term psychoanalytic psychotherapy.

There were very few gender differences. Of the 14 scales, there were gender differences in only three scales. Men did not start off with high scores in Hy and did not show a significant change in this scale ($p=.46$). Women, on the other

hand, showed more problems in this area, and did improve ($p < .001$). Men did not change in Pa ($p = .99$); women did improve ($p < .001$). Men had more problems with Ma and improved ($p = .009$); women had less problems and little change ($p = .08$). Overall, these results support pooling the male and female data.

The scales of psychopathology (F, Hs, D, Hy, Pd, Pa, Pt, Sc, Ma, Si, and A) and maturity (K and Es) were not predicted to change in the early phase of treatment, but only after a few years of treatment. It is not clear from the above pre-post results when most of the changes occurred. Much of the outcome literature predicts that most of the changes would occur within first 6 months of treatment. A sub-sample of 18 patients had more than two testings during the course of their therapy. The results showed that during the first phase of treatment ($M = 2$ years, or 24.9 months, $SD = 17$) only 2 out of 13 hypothesized scales significantly changed. The F scale initially decreased ($p = .004$) and continued to steadily decrease throughout the treatment ($p < .001$). The Pa scale initially decreased ($p = .002$) and continued to decrease throughout treatment ($p < .001$). However, most of the scales, i.e.: K, D, Pd, Pt, Sc, Ma, Si, A and Es did not significantly change between the first and second testing. But they all significantly changed between the second and final testing ($p = .003, .001, .001, < .001, < .001, .018, .013, .001, \text{ and } .006$ respectively; see Table 2 and Figure 2).. Hypothesis #2 was supported by the data. The decreases in psychopathology, and the increases in maturity, as measured by the MMPI/MMPI-2 scales, were mainly curvilinear. Two scales showed no change (Hs and Hy), and two scales showed quick change (F and Pa). However, most of the hypothesized scales did

not significantly change during about the first two years of treatment, but did by the end of treatment after about 5 years.

Psychopathology, Ego Strength and Length of Treatment

A more succinct way to present these results, is to reduce the findings to two scales of the MMPI/MMPI-2, one measuring over-all psychopathology and one measuring ego strength. The best over all measure of psychopathology is the first factor A scale. Welsh (1956) factor analyzed the MMPI items, finding the first factor, he labeled "Anxiety", picked up most the variance on the MMPI associated with psychopathology. Although Welsh labeled the scale "Anxiety", it does not refer to just anxiety disorders, but rather assesses the basic distress found within psychopathology. Baron's (1953) "Ego strength" scale (Es) measures overall psychological maturity and resiliency. Es is a good measure of stress tolerance, resourcefulness, independence, discipline, and flexibility. The A scale and the Es scale are very stable over years. In a retest study of 1072 men over 5 years (Spiro III, 2000), the A scale pre-test mean was 45.95 (SD = 9.39), and 5 years later was 45.51 (SD = 9.49). The Es scale had similar high stability, with a pre-test mean of 52.35 (SD = 8.77), and 5 years later a mean of 52.12 (SD = 9.17). Their stability correlations were .86 and .73 respectively. The two scales are not however highly correlated with each other, -.23 (Swenson, Pearson, & Osborne, 1973). Scales A and Es did not significantly change in the early phase of long-term treatment (see Table 2.). They showed no significant change after an average of two years of psychotherapy. Most patients are in and out of treatment by 2 years, and usually have gained significant symptom

reduction and skill training. However, the A and Es scales measure deep-seated personality traits, and these results suggest that although there may be symptom reduction in short-term treatment, the person's characterological baseline of psychopathology and resiliency are not significantly changed. The results suggest that during the first year or two, acute symptoms may be reduced, but significant reliable changes to personality do not occur until after about 2 years of treatment. A person's characterological baseline can change with years of intensive treatment. Patients continued to improve over the course of years of treatment (see Figure 3.)

Discussion

The MMPI/MMPI-2 is the most used and validated objective test of psychopathology in our field. Yet researchers have found the MMPI/MMPI-2 to be a poor outcome measure, since it wasn't providing empirical support for brief treatments. Researchers rarely study treatments that last more than 20 sessions. However, this study clearly demonstrated that the MMPI/MMPI-2 was highly reactive to "large dose" treatment, i.e. long-term psychoanalytic psychotherapy. Most the psychopathology scales on the MMPI/MMPI-2 not only significantly changed (most by $p < .001$), but they changed from being in the deviant range of functioning to the normal range of functioning after an average of 3 years of treatment. Scale A, a first factor scale of the MMPI items, is very stable and a good overall measure of psychopathology, decreased by 50.3%. The F scale, another index of overall pathology decreased by 42.3%. There

were major reductions in the areas of somatization, depression, intimacy problems, anger, narcissism, anxiety, identity diffusion, impulsiveness, and insecurity. There were also concomitant increases in maturity. In other words, the MMPI/MMPI-2 not only showed a significant and powerful decrease in psychopathology with long-term psychotherapy, but also showed a significant increase in personality maturation as well.

Only 2 of the 13 hypothesized scales significantly changed during about the first 2 years of treatment. This result is consistent with the literature that indicates that the MMPI/MMPI-2 is not a good outcome measure for low dose treatment. But after an average of 5 years of treatment, almost every scale changed, most $p < .001$. Looking at both samples, after about 2 years, 3 years and 5 years, it seems that on the average, between the second and third year of treatment, patients significantly changed. This is consistent with psychoanalytic treatment. During the middle phase of treatment, patients begin to work through deep-seated issues. This is when the patients begin to internalize the therapy, and make reliable, structural changes to their personalities. It takes years to access some areas of personality, and to integrate these new changes into one's enduring personality structure. This finding, that deep changes to personality occur roughly after two years of treatment, is also found in other research, and is not unique to this study.

Kordy, vaon Rad, and Senf (1989) found that between 2.5 and 3.5 years of psychoanalytic treatment within a dose-effect analysis produced the largest change over time. That is, patients benefited most when they stayed in

treatment at least that amount of time. Weiner and Exner (1991) using the Rorschach, found that there were few changes in short-term therapy, but found extensive changes to personality after about 2.5 years, and the changes continued into the fourth year of the study for those patients in psychoanalytic psychotherapy. These findings may explain why Seligman (1996) found that patient satisfaction with therapy was the greatest for those who stayed with treatment for two years or more.

These results support the value of not only long-term psychoanalytic psychotherapy, but the concept of phases of psychotherapy. A beginning phase is often characterized by the patient learning how to be a patient, and establishing a working alliance with the therapist. A middle phase is characterized by the patient going beyond talking about the manifest level of the problem, to where the patient can begin to discuss and experience deeper levels of personality. In this phase the patient can assess areas that were unconscious and relevant to the problems, and use insight to not only reduce or eliminate symptoms, but to achieve greater maturation in the structure of their personality. The therapeutic alliance and mutative interpretations allows the patient to work through deep-seated issues. Finally, there is a termination phase that deals with loss and separation that further aids in maturation of personality. These results support the concept of a middle phase of working through deep issues after about the second year of treatment.

Howard et al. (1996) proposes three phases of treatment based on their outcome research. The "Remoralization" phase occurs in the first few sessions,

often in the first session, whereby the patient has hope of getting better with treatment. The “Remediation” phase focuses on the patient’s symptoms. The treatment is on coping skills and symptomatic relief, “...typically requires about 16 sessions...”. This is the focus of the brief “Empirically Supported Treatments”. The third phase is the “Rehabilitation” phase, “...probably what has traditionally been thought of as ‘psychotherapy’...the rehabilitation of life functioning is quite gradual...”(p. 1061). This concept of the “Rehabilitation” phase is consistent with a middle phase of psychotherapy, in which deeper work on personality occurs. We can roughly guess that the beginning phase can be anywhere from the first session to the first few weeks. Of course, some patients never really submit to become patients and never really get beyond this phase. The second phase of treatment starts when the patient has learned how to be a psychotherapy patient and begins to work on a deeper level. The patient then goes beyond focusing on the manifest symptoms, and into the causes of the symptoms in the unconscious, and translates insights into maturation. It is in this working through phase that a person’s baseline of functioning is improved.

However, in reality one cannot be so specific. Phases of treatment occur only vaguely in very rough periods of time. I did the therapy with all these people. Some made progress in two years that took others ten years to make similar progress. Many patients seemed to have gotten worse before they got better. Many of the MMPI/MMPI-2’s indicated an increase in problems at the second testing. This was usually due to the patient’s increased ability to acknowledge his or her own pathology. The first testing often indicated a high

degree of defensiveness and ego-syntonic pathology. Patients were often only aware of their manifest complaints. After a few years of working through resistances, patients' MMPI/MMPI-2 indicated less defensiveness and their underlying self-defeating traits became apparent or ego-alien. In other words, as the patients matured in therapy, they could take responsibility for their previously unconscious personality flaws, and begin to make maturational changes.

No two patients were alike in the rate they changed. Research such as this is useful to make broad statements about the necessity for long-term therapy to help individuals with long standing psychopathology. However, such findings are limited and may only serve as a guide when applied to individual cases, and encourage those who doubt that such changes are possible.

Freud felt that treatment had to be long, but that it was impossible to predict how long any one treatment might take. He referred to Aesop's fable of the Wanderer. One cannot tell a person how long it will take to walk to a destination, with out first noticing the pilgrim's pace. But Freud wasn't even happy with this metaphor, since, "...the neurotic can easily alter his pace and at times make but very slow progress" (1913). Freud felt that the pace was based on what the mind could tolerate: "The shortening of the analytic treatment remains a reasonable wish,...Unfortunately, it is opposed by a very important element in the situation- namely, the slowness with which profound changes in the mind bring themselves about..."(1913, p.350). Freud did not wish to focus on a person's symptoms, behaviors, cognitions, or coping skills, but rather to bring about "profound changes in the mind". Profound changes in the mind, or what we would refer to

today as “personality”, is the goal of psychotherapy. A therapy to help mature personality, is not simply skill training, coping or symptom relief. It necessitates a deep and long treatment. Personality is necessarily resistant to change, as is our basic biology resistant to foreign invasion. The mind’s resistance to change is basically a self-protective mechanism, much as the self protects itself from harm or even death. It takes years to develop the type of therapeutic relationship capable of working through these powerful resistances to change.

This naturalistic study from a private practice has methodological flaws. The sample size is low, but comparable to other similar studies of long-term psychotherapy. The criteria for selection of data were restricted to those who could afford private practice fees, and for those patients who had problems detectable to the MMPI/MMPI-2. The patients stayed in treatment longer than most patients. However, the patients in this study are probably similar to most patients in a psychoanalytic private practice. The patients were well educated, motivated, and polysymptomatic . Mainly they were depressed, anxious and had long standing problems with relationships. Their manifest symptoms were largely due to their personality disorders.

A major problem that plagues long-term psychotherapy research in private practice settings is the lack of a control group. Such controls are not always possible. A control group of outpatients to study long-term treatment, who receive anything less than the best possible therapy, would be impractical and inhumane. But, since the MMPI/MMPI-2 is stable over a period of years, and does not show a regression to the mean with deviant scores, the MMPI/MMPI-2

pre-test can be used as a control. There is also the problem of experimenter bias. Archival research has methodological problems, such as “cherry picking” the best cases. So that I wouldn’t bias my data, and pick only successful cases, I instructed an intern to go through my files and take only tests that had at least a pre and post testing, and had at least one scale on the pre-test that indicated psychopathology. Another psychologist did the data analysis. Since the results are so similar to other larger and better control studies, I believe that these results are generalizable to other similar practices. The form of treatment in this study was psychoanalytic psychotherapy. It is well researched and manualized (Luborsky, 1984). It demands a great deal of training and supervision compared to other treatments, but it allows for an understanding and treatment of deep personality problems.

Psychotherapists in private practices can give most their patients, whenever practical, the MMPI-2, or any similar test at the beginning of treatment, and periodically throughout treatment. This data can be pooled across practices. The huge research gap between the Empirically Supported Treatments that are very brief, and the long-term therapy found in most private practices could begin to close.

The majority of the public seeks brief psychological treatments for their problems, and there are many effective treatments available to them. However, many individuals suffer from problems that can only be helped by a maturation in personality. Most the patients in this study were polysymptomatic mainly due to their personality disorders. Brief treatments on each separate symptom, would

have done little to relieve their suffering. Many had been in symptom-focused treatment before coming to long-term psychotherapy. The distinction should be simple enough; brief cognitive-behavioral treatments have been shown to work well for many specific symptoms. They are brief and cost effective. However, many individuals may require long-term psychotherapy. The specialized skills, patience and therapeutic relationship in long-term psychoanalytic psychotherapy fosters deep changes to personality that allows for a better ability to handle stress, intimacy and a greater sense of well being. This study demonstrates with a well-validated objective test, that this is possible after years of effective treatment.

Table 1MMPI/MMPI-2 Raw Score Changes After About 3 Years in Therapy

Variable	Hypothesis	Start of treatment Mean (<u>SD</u>)	<u>M</u> = 3 yrs tx Mean (<u>SD</u>)	<u>p</u>	% change
L, Lie	↔	2.75 (1.64)	2.89 (1.38)	.424	<u>ns</u>
F, acute pathology	↓	8.51 (4.95)	4.91 (3.23)	<.001	-42.3
K, Adjustment	↑	12.47(4.72)	15.98 (4.36)	<.001	28.1
Hs, Hypochondria	↓	9.16 (5.54)	5.53 (3.64)	<.001	-39.6
D, Depression	↓	28.04 (6.91)	20.67 (4.78)	<.001	-26.3
Hy, Hysteria	↓	25.62 (5.65)	23.18 (4.13)	<.001	-9.5
Pd, Psychopathic	↓	23.96 (4.91)	18.58 (5.18)	<.001	-22.5
Pa, Paranoia	↓	13.76 (2.93)	12.29 (10.76)	.316	<u>ns</u>
Pt, Psychasthenia	↓	21.93 (7.77)	13.13 (6.55)	<.001	-40.1
Sc, Schizophrenia	↓	21.31 (10.2)	11.82 (7.51)	<.001	-44.5
Ma, Hypomania	↓	18.04 (4.35)	16.27 (4.22)	.002	-9.8
Si, Introversion	↓	33.15 (9.91)	26.31 (9.77)	<.001	-20.6
A, Anxiety	↓	20.20 (8.45)	10.04 (7.97)	<.001	-50.3
ES, Ego strength	↑	41.61 (6.39)	46.61 (6.06)	<.001	12.0

Note. The scales are in non-K corrected raw scores.

Table 2

MMPI/MMPI-2 Raw Score Changes After About 2 and 5 years in Therapy

Variable	Test 1 Start of tx Mean (SD)	Test 2 M = 2 yrs Mean (SD)	Last Test M = 5 yrs Mean (SD)	Omnibus F p- value	Testing (1-2)	Testing (2-3)	Testing (1-3)
L	2.61 (1.46)	2.50 (1.58)	3.17 (1.04)	.204	.805	.144	.116
F	9.72 (5.11)	8.28 (3.49)	5.00 (3.34)	<.001	.004	.001	<.001
K	12.11 (4.99)	12.83 (4.90)	16.83 (4.50)	.001	.553	.003	<.001
Hs	9.33 (6.24)	7.67 (5.78)	6.28 (4.24)	.028	.130	.129	.007
D	30.67 (8.08)	28.44 (6.68)	21.89 (5.67)	<.001	.221	.001	<.001
Hy	25.39 (5.16)	23.22 (5.71)	23.94 (5.24)	.114	.044	.575	.204
Pd	24.89 (5.11)	22.72 (4.80)	18.28 (4.99)	<.001	.067	.001	<.001
Pa	14.94 (3.35)	12.56 (2.96)	10.89 (2.27)	<.001	.002	.040	<.001
Pt	24.39 (8.68)	21.44 (7.59)	13.72 (7.54)	<.001	.157	<.001	<.001
Sc	25.83 (10.1)	22.22 (8.78)	13.17 (7.71)	<.001	.150	<.001	<.001
Ma	18.61 (4.55)	17.89 (4.87)	15.33 (4.13)	.008	.362	.018	.002
Si	36.89 (11.1)	35.00 (10.5)	28.06 (11.0)	.005	.441	.013	.001
A	23.17 (8.72)	20.44 (7.99)	11.50 (7.82)	<.001	.284	.001	<.001
ES	40.56 (6.45)	43.06 (6.52)	46.33 (6.16)	.005	.070	.006	.002

Note. The scales are in non-K corrected raw scores.

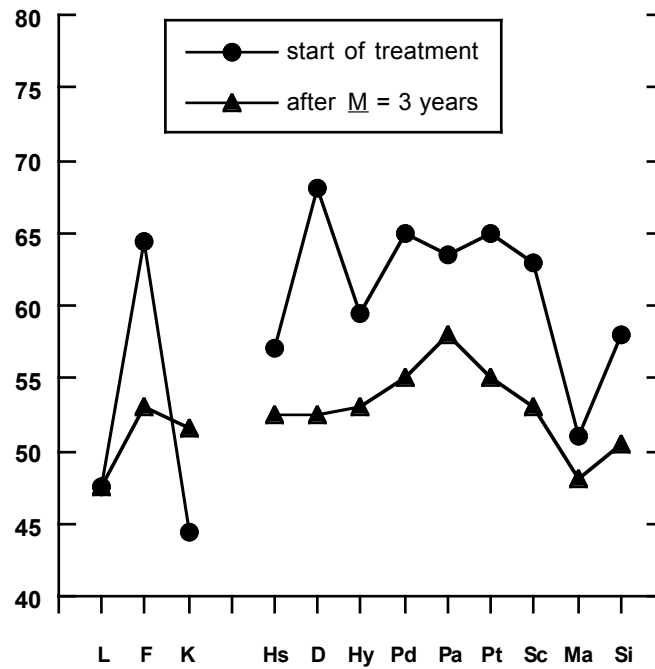


Figure 1 Changes in psychotherapy after about 3 years of treatment. T45-55 represents normal scores, T65 and above are high scores. The graph is based on MMPI-2 norms using K corrected T scores.

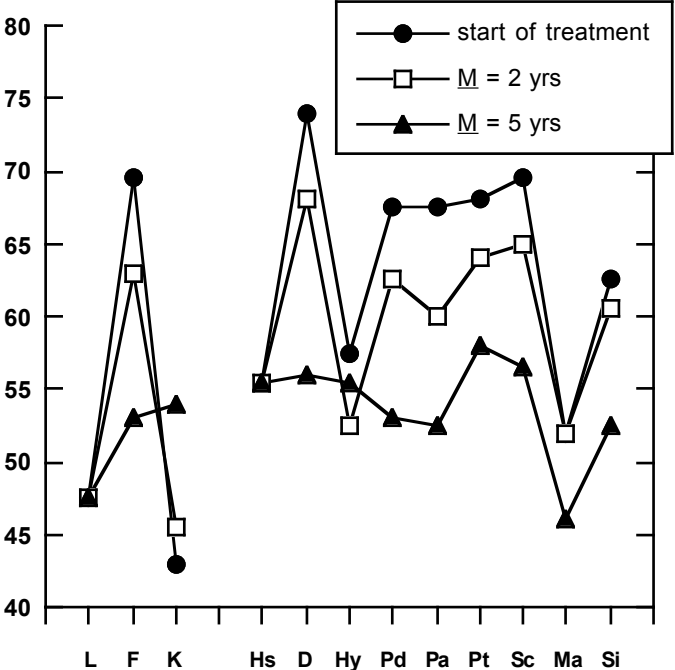


Figure 2 Changes in psychotherapy after about 2 and 5 years of treatment. T45-55 represents normal scores, T65 and above are high scores. The graph is based on MMPI-2 norms using K corrected T scores.

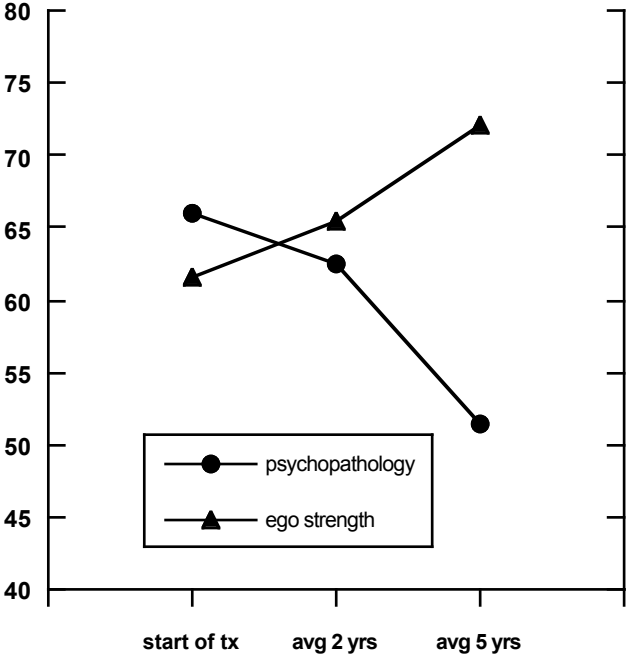


Figure 3 Changes in patients as measured by the MMPI/MMPI-2 A scale of overall psychopathology, and the Ego strength scale, after about 2 and 5 years of psychoanalytic psychotherapy. T45-55 represents normal scores, T65 and above are high scores. The graph is based on MMPI-2 norms using K corrected T scores.

Author Note

Many thanks to research assistants Trish Brafford and Marguerite Sywenky, and to Thomas Wasser, Ph.D. for the statistical analysis, and also to Michelle Scheirer for scoring and clerical services.

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