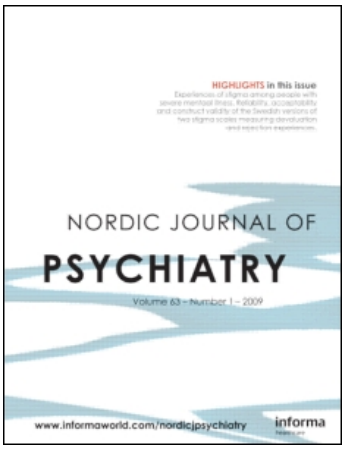

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Outcome of a psychotherapeutic programme for patients with severe personality disorders

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Outcome of a psychotherapeutic programme for patients with severe personality disorders

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A specialized psychotherapeutic day treatment programme was established in a Danish clinical setting on the basis of recent research and advances in treatment for severe personality disorders. This study analyses treatment effectiveness by comparing the day treatment programme with a treatment as usual (TAU) situation as given to personality-disordered patients on a waiting list. The sample consisted of 66 personality-disordered patients consecutively referred and diagnosed according to standardized criteria. The intervention group comprised 38 patients. There was no selection made for the intervention group: when the programme capacity was reached, a waiting list of 28 consecutive patients formed the comparison group; none of these patients figured in the intervention group. Intervention included psychodynamic and cognitive-based therapy in a group/individual setting and lasted 5 months. Outcome measures were self-rated and observer-rated multidimensional evaluation of functioning relevant to personality-disordered patients. The day treatment programme did significantly better in reducing acute and prolonged hospitalizations and suicide attempts, in stabilizing the psychosocial functioning and in reducing complaints that lead to treatment. The intensive day treatment programme stabilized patient functioning but did not lead to changes on personality traits for which more extended treatment might be necessary.

• *Borderline personality disorder, Day treatment programme, Outcome, Personality disorder, Psychotherapy.*

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The view on the prognosis following treatment of personality disorders has traditionally been pessimistic, and drop-out rates have reached 43% (1, 2). The last decade has given grounds for new optimism owing to the introduction of specialized treatment, which in a coherent and structured way draws on different approaches and modalities such as psychodynamics, and cognitive and psychopharmacological intervention in individual or group therapy. Two studies have thus reported effectiveness of a specialized psychotherapeutic day hospital treatment. In the UK, a randomized controlled trial showed that a long-term psycho-analytically oriented day hospital treatment programme was more effective than standard psychiatric care in improving symptoms and social and interpersonal functioning, and in preventing drop-out and decreasing hospitalizations and suicidal acts (3). In a prospective naturalistic Norwegian study of a short-term day hospital treatment programme, encouraging improvements were achieved in symptoms, social and interpersonal functioning and in drop-out rates (4–6).

This study aims to compare the effectiveness of a specialized short-term psychotherapeutic day treatment programme with a treatment as usual (TAU) for personality-disordered patients on a waiting list in a Danish clinical setting.

Methods

Design

This study adopts a prospective, naturalistic comparison design. In the intervention group, measures were assessed at the beginning of the treatment (T_1) and upon its termination (T_2) after 5 months. In the comparison group, measures were used when the patients were assessed (T_0) and at the beginning of treatment (T_1) after a mean duration of 10.5 months.

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The study took place at the Day Unit for patients with personality disorders, which is part of the Psychotherapeutic Unit, Aalborg Psychiatric Hospital, Denmark. The intervention group consisted of 38 patients. There was no selection made for the intervention group: when the programme capacity was reached, a waiting list of 28 consecutive patients formed the comparison group; none of these patients figured in the intervention group. The study was approved by the Local Scientific Ethical Committee and the Data Surveillance Authority.

Intervention

Treatment consisted of an 11-h, weekly psychotherapy programme for 5 months. Patients received: 1) twice-weekly psychodynamic small-group and large-group therapy; 2) weekly cognitive group therapy, body awareness group therapy, psycho-educational group and music or art group therapy; 3) individual psychotherapy; 4) a key person helping patients meet regularly for therapy, usually contacting the patients by phone when they failed to attend treatment and encouraging the patients to meet with community workers; 5) when needed patients received a medication review by the consulting psychiatrist. Upon termination, all patients were encouraged to continue treatment in outpatient group therapy.

The aims of the treatment programme were to:

1) Create an alliance to keep patients in therapy;
2) Reduce symptoms of acute illness (hospitalizations and suicide attempts) and maintain social functioning;
3) Reduce the symptom burden and improve interpersonal functioning.

Before entering treatment, patients had to sign a treatment contract with the following obligations: sharing or talking about self-destructive or suicidal behaviour/thoughts, not committing suicide, not attacking others, not meeting other patients outside the unit, not abusing alcohol or drugs and attendance to all sessions is mandatory. The treatment was not manualized but relied on recognized guidelines and principles for treatment of severe personality disorders (7). The leading treatment principles were elements from modern psychodynamic and cognitive theories, primarily mentalization-based therapy and schema therapy (8–10).

The team consisted of four nurses, a social counsellor, an occupational therapist, a music therapist, a psychologist and a psychiatrist. All team members had received formal education and training with duration of 3 years in psychodynamic psychotherapy, and one-third of the staff also had received a formal cognitive training of 1 year's duration. The majority worked together as co-therapists and met for team meetings twice a day for 30 min. The staff received monthly supervision.

TAU situation

During the waiting time, in case of crisis or poor motivation, patients in the comparison group individually attended supporting and motivating sessions with a team member. The meetings had two main purposes: 1) to keep patients on the waiting list and 2) to prepare them for day treatment in groups. This was a low-intensity contact with an average of one session per month. The patients' medication was adjusted and they were hospitalized in general or emergency room psychiatric services when necessary.

Patients

The sample consisted of patients referred between 1 January 2002 and 1 December 2004 ($n = 66$). Included were all patients over 18 years of age who had signed a treatment contract, who met the criteria for personality disorder and scored low on the level of global functioning (GAF, global assessment of functioning)—a cut-off score of 50 was used. The mean GAF of the sample at baseline was 43.7 corresponding to a severe range (41–50) of symptoms and impairment. Excluded were patients fulfilling DSM IV (*Diagnostic and Statistical Manual of Mental Disorders IV*) criteria for schizophrenia, bipolar disorders, substance abuse, antisocial personality disorder and organic brain disorder. None of the referred patients was excluded.

Outcome measures

All patients were assessed by trained and experienced assessors using the Structured Clinical Interview for DSM-III-R (SCID II) (11, 12) for Axis II diagnoses, and for Axis I disorders with the Present Status Examination ICD-10 (PSE) translated into Axis I disorders (13, 14). No formal reliability test on diagnostic agreement was undertaken. Patients' motivation, socio-demographic variables and extent of suicidal/self-destructive behaviour were assessed in two or three interviews by team members.

Outcome measures consisted of self-rated and observer-rated multidimensional evaluations of functioning relevant to personality-disordered patients.

The Symptom Checklist SCL-90-R (Global Severity Index (GSI)) (15) was used to assess patients' overall subjective experience of symptoms. This is a widely used symptom report inventory with good psychometric properties.

The Symptom Checklist SCL-90-R (Personality Severity Index (PSI)) (16): the personality severity index-score is the mean value of the scores on the SCL-90-R subscales of interpersonal sensitivity, hostility and paranoid ideation. It reflects distress related to the personality

disorder as opposed to the GSI, which incorporates all symptoms. A high GSI value may also be a sign of an anxiety or depressive episode as a sign of distress related to the personality disorder. The PSI reflects subjective distress consistently being reported by personality disordered and has discriminatory power when statistically corrected for the influence of anxiety and depression.

Clark's Personal and Social Adjustment Scale (CPSAS) (17) consists of 14 items rated from satisfying to very unsatisfying (4), covering specific aspects of the patient's maladjustment: "work", "relations", "social capability", "positive mental health", and "coping, esteem and spirit".

The Inventory of Interpersonal Problems—Circumplex version (IIP-C) (18–20) was used to identify dysfunctional patterns of interpersonal interactions. It consists of 127 items covering eight dimensions of interpersonal problems: domineering, intrusive, overly nurturing, exploitable, non-assertive, socially avoidant, cold and vindictive. We used the mean score, which provides information on the overall interpersonal functioning. This score is widely used in psychotherapy research and has demonstrated its relevance in assessing outcome on more stable personality traits.

The Target Complaint (TC), a self-rated measure, is structured as a 5-point scale (5 = worse, 0 = a lot better) and is designed to provide information about and measure the three major complaints that led the patient to seek treatment (21).

The staff rated the Global Assessment of Functioning (GAF) (11, 22). This measure consists of a scale from 0 to 100 representing a range from psychological sickness to health in a specified period, 4 weeks in the present study. To assess more specifically the social/occupational functions and symptoms, we used a split version—the GAF-F (social/occupational function) and the GAF-S (symptoms) (23). No formal reliability test on rating agreement was undertaken. The test was the combined result of a consensus among the team members of the day treatment. All were trained and performed on a weekly basis GAF rating on patients referred to the Psychotherapeutic Unit.

Patients' self-reported suicidal acts with or without hospitalization was assessed by a team member at baseline and upon termination. The number of hospitalizations in psychiatric emergency unit and the number of prolonged inpatient hospitalizations were measured and cross-checked with psychiatric records and hospital inpatient database. The number of suicidal acts and hospitalizations in the intervention group was checked for another 5.5 months after termination of treatment to match duration with the comparison group (10.5 months).

Statistical analyses

Data were analysed with Stata version 9.2 (StataCorp, 2005) and R version 2.4.1 (R Development Core Team, 2006), and a significance level of 5% was applied.

Demographic and clinical characteristics and patients' hospitalization and suicide attempts were examined using Fisher's exact test. The change in outcome measures from T_1 to T_2 (intervention group) or T_0 to T_1 (comparison group) was analysed with a paired *t*-test, and difference between groups by two-sample *t*-test with equal variances. Effect size (ES) of outcome was calculated by Cohen's *d* and interpreted as: 0.20 = small effect, 0.50 = medium effect and 0.80 = large effect (24). Because of attrition from the intervention group and higher variations than expected, the power of the tests varied and was not as high as expected from the start. Baseline demographics, clinical characteristics and baseline outcome measures of patients' prematurely terminating treatment were analysed and compared with completers using Fisher's exact test. These drop-outs do not contribute to the outcome analyses because the measures were missing upon termination.

Results

Socio-demographic and clinical comparisons at baseline

At baseline (T_0 respectively T_1), no significant differences were detected in demographic and clinical variables between patients in the intervention group and in the comparison group (Table 1).

About half of the patients lived alone and unemployment was high. Referrals came mainly from general practitioners and psychiatric hospitals. Both groups made extensive use of mental health services. The majority had previously been hospitalized, received psychotherapy or received psychopharmacological treatment. The level of impulsivity was high, half of the patients in both groups reported aggressive/self-destructive acts and one-third previous drug or alcohol abuse.

The most frequent personality disorders were the severe disorders. Borderline personality disorder was seen in 71.1% of the patients in the intervention group and in 85.7% of the patients in the comparison group. Furthermore, the intervention group comprised disorders not found in the comparison group: dependent 7.9%, narcissistic 2.6%, histrionic 2.6% and schizoid 5.3%. The co-morbidity with Axis I disorders was considerable in both groups: 28.9% were diagnosed with anxiety in the intervention group and 28.6% in the comparison group; 10.5% were diagnosed with depression in the intervention group and 14.3% in the comparison group, and eating disorders 15.8% and 7.1%, respectively.

Table 1. Demographic and clinical characteristics of the intervention group and the comparison group at baseline.*

	Intervention group ($n=38$)	Comparison group ($n=28$)
	%	%
Age, mean (*s*)	27.4 (6.1)	27.4 (5.8)
Gender, women	86.8	82.1
Living alone	50.0	51.9
Unemployed	74.1	82.1
Referred from general practitioner	36.8	57.1
Referred from psychiatric hospital	31.6	25.0
Previous psychiatric hospitalization	60.5	53.8
Previous psychotherapy	62.2	57.9
Previous suicidal/self-destructive acts	53.5	50.0
Aggressive/destructive acts	44.4	52.0
Previous drug or alcohol abuse	48.2	59.2
Psychopharmacological treatment	55.1	59.2
DSM IV axis II diagnoses		
Borderline	71.1	85.7
Avoidant	5.3	7.1
Dependent	7.9	0.0
NOS	5.3	7.1
Narcissistic	2.6	0.0
Histrionic	2.6	0.0
Schizoid	5.3	0.0
Co-morbid DSM IV axis I disorders		
Anxiety Disorder	28.9	28.6
Depression	10.5	14.3
Eating disorder	15.8	7.1

*The two groups were compared using Fisher's exact test or (age) *t*-test but no significant differences were found.
s, standard deviation; NOS, not otherwise specified.

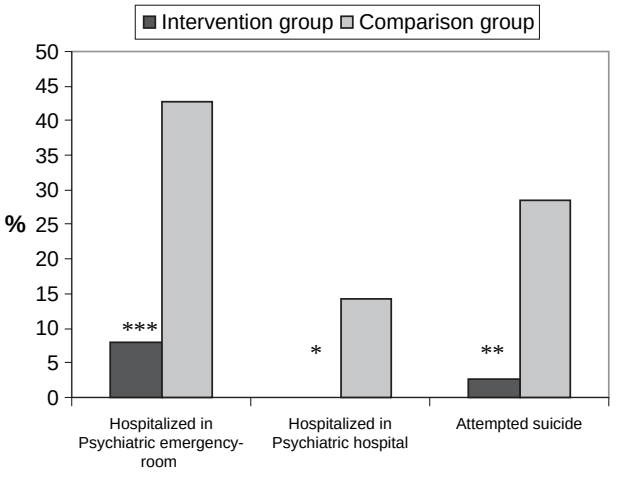

Fig. 1. Percentages of patients hospitalized in a psychiatric emergency room, hospitalized in psychiatric hospital and who attempted suicide.† *$P \leq 0.05$; **$P \leq 0.01$; ***$P \leq 0.001$. †The two groups were compared using Fisher's exact test.

Outcome

Seven (18.4%) of the 38 patients in the intervention group prematurely terminated treatment and were therefore not assessed at termination time T_2. One patient was discharged because of contract violations, one received another less intensive treatment in the Unit, and five patients dropped out. These patients did not differ significantly on socio-demographic, clinical characteristics and baseline measures from those who completed treatment.

The intervention group was significantly less hospitalized and the percentage of patients attempting suicide was significantly lower compared with the comparison group (Fig. 1). During treatment, there was one suicide attempt (2.6%) and in three cases (7.9%) it was necessary to take a patient to the psychiatric emergency unit (on average for 1.5 day) because of suicide risk or aggravated symptoms. None was admitted to the psychiatric hospital during the intervention period.

In the comparison group, a high number of patients experienced acute symptoms: 12 patients (42.8%) went to the psychiatric emergency room for an average stay of 2 days. Four patients (14.3%) were admitted to the psychiatric hospital for 17 days on average. Eight patients (28.6%) attempted suicide during waiting time, 50% of whom were hospitalized.

The intervention group experienced a significant decrease from the start of treatment (T_1) to the end of treatment (T_2) on all measures except one (Table 2). The patients on the waiting list experienced no significant changes. Patients in the intervention group experienced a significant decrease in the severity of symptoms on the GSI ($P=0.03$); in the comparison group the decrease was non-significant, and no significant difference was observed when the two groups were compared. The more stable personality traits (PSI) decreased significantly with a medium effect in the intervention group ($P=0.03$), and with a low effect and a non-significant decrease in the comparison group; compared with the comparison group, there was no significant difference. The patients' interpersonal problems (IIP-C) improved non-significantly with a small effect size in the intervention group; in the comparison group the IIP-C remained the same, the difference between groups was not significant. The target complaints (TC) consisted of symptom complaints and interpersonal problems. They improved significantly with high effect ($P<0.0001$) in the intervention group, but deteriorated in the comparison group. The difference was highly significant ($P<0.0001$). Patients' social adjustment (CPSAS) improved significantly with a medium effect in the intervention group ($P=0.0055$); and in the comparison group it deteriorated but not significantly and with vanishing effect size; the difference between groups was weakly significant ($P=0.047$). A significant and large improvement in patient' functioning GAF-F ($P<0.0001$) was observed in the intervention group; in the comparison group no change was seen and the effect was poor; the between-group difference was highly

Table 2. Outcome measures.

	Intervention group ($n=31$)				Comparison group ($n=28$)				Between groups
	Mean (s, n)	Mean (s, n)			Mean(s, n)	Mean(s, n)			
	T_1	T_2	Diff (CI)†	ES (CI)	T_0	T_1	Diff (CI)†	ES (CI)	P-value‡
GSI	1.74 (0.54, 29)	1.48 (0.65, 29)	−0.26 (−0.49, −0.03)*	0.43 (−0.09,0.95)	1.80 (0.65, 26)	1.60 (0.59, 26)	−0.20 (−0.42,0.02)	0.32 (−0.22,0.87)	0.7
PSI	2.41 (0.46, 29)	2.15 (0.55, 29)	−0.26 (−0.48, −0.03)*	0.51 (−0.02,1.03)	2.49 (0.50, 26)	2.33 (0.52, 26)	−0.15 (−0.32,0.02)	0.30 (−0.25,0.85)	0.5
IIP-C	1.80 (0.42, 29)	1.68 (0.55, 29)	−0.11 (−0.30,0.08)	0.23 (−0.29,0.75)	1.67 (0.43, 26)	1.61 (0.54, 26)	−0.06 (−0.25,0.12)	0.13 (−0.42,0.67)	0.7
TC	5.28 (0.59, 27)	3.78 (1.17, 27)	−1.51 (−1.96, −1.05)***	1.63 (1.00,2.24)	5.17 (0.83, 20)	5.1 (0.80, 20)	−0.07 (−0.35,0.22)	0.08 (−0.54,0.70)	<0.0001
CPSAS	1.78 (0.41, 29)	1.99 (0.43, 29)	0.21(0.07,0.36)**	0.51 (−0.02,1.03)	1.93 (0.59, 26)	1.92 (0.58, 26)	−0.01 (−0.20,0.17)	−0.02 (−0.57,0.52)	0.047
GAF-F	42.1 (5.93, 30)	47.2 (7.61, 30)	5.1 (2.9,7.3)***	0.75 (0.22,1.27)	44.1 (5.65, 24)	44.5 (6.21, 24)	0.42 (− −1.41,2.25)	0.07 (−0.50,0.64)	0.0019
GAF-S	43.5 (5.86, 30)	50.4 (7.09, 30)	6.9 (4.8,8.9)***	1.06 (0.51,1.59)	45.0 (4.06, 24)	45.0 (4.90, 24)	−0.04 (−2.23,2.14)	−0.01 (−0.58,0.56)	<0.0001

* $P \leq 0.05$; ** $P \leq 0.01$; *** $P \leq 0.001$.
CI, 95% confidence interval; ES, effect size measured as Cohen's d; T_0, time of assessment; T_1, start of treatment, T_2, end of treatment.
†Paired t-test.
‡Two-sample t-test with equal variances.

significant ($P=0.0019$). Intervention brought about a significant, large effect in GAF-S ($P<0.0001$); no effect on this outcome was observed in the comparison group; and the between-group difference was highly significant ($P<0.0001$).

Discussion

All baseline measures indicated a high level of pathology, extensive use of mental health services and low psychosocial functioning among patients. The day treatment programme did significantly better in reducing symptoms of acute illness (hospitalizations in acute ward, psychiatric hospitalizations and suicide attempts), in stabilizing the psychosocial functioning (GAF, CPSAS) and in reducing complaints that lead to treatment (TC) than the TAU situation. The fact that target complaints had the largest effect size corresponds to results in other studies (e.g. review in Luborsky et al. (25)). It might be highly relevant for patients to achieve change on their primary problems.

Considering the level of psychiatric disturbance, the number of drop-outs from the intervention group could be expected and accepted. Drop-outs from the waiting list were not observed. Regarding self-reported measures on symptoms and interpersonal problems, there was no significant difference between the intervention group and the comparison group. A treatment period of only 5 months was not sufficient to achieve clinically valid results for core personality problems in the severely impaired sample with low mentalizing capacity. The level of functional impairment before treatment is known to correlate negatively with the treatment prognosis across psychiatric disorders such as depression (26), bulimia nervosa (27) and personality disorders (4). These more sustaining problems are expected to improve during the outpatient treatment scheduled to follow the day treatment programme. This short-term intervention should therefore be considered a means for establishing a secure environment, which is known to be a major achievement in the treatment of severe personality-disordered patients (28).

The overall outcome of the present study is comparable to the 18-week results obtained in the Norwegian study (5) and to the 6-months' outcome measures obtained in the UK study (3).

As in our study, effect sizes in the Norwegian study ranged from high on the GAF (1.45) to moderate on the GSI (0.55); the drop-out was low (16%) and the suicide attempt rate was only 1%.

Similarly, in the UK study the drop-out rate was low (12%), hospitalizations were reduced and there was a moderate improvement on the GSI (mean 2.50 to mean 2.40) compared with the control group (mean 2.30 to mean 2.40). Percentage of patients attempting suicide was significantly reduced compared with the controls

but remained relatively high in their intervention group at 6 months (40%), a percentage comparable to the present study, and that the Norwegian study was achieved at 18 months.

However, the samples differ considerably in terms of the severity of pathology and in the duration of treatment. The duration of treatment in the present study is comparable to the Norwegian model, but the Norwegian sample included 12% non-personality-disordered patients. The study conducted in the UK included only borderline personality-disordered patients and is therefore in that sense more comparable to our study sample. However, the duration of treatment was much longer (18 months) in the UK study than in ours, corresponding to their goals of improving interpersonal functioning.

A study including both the day treatment phase and the following outpatient phase will allow for better comparison between our two-phase structure with a decline in the amount of treatment and the UK study. Some patients may have been "slow starters" and needed a longer day treatment period as in the UK study; others may not have needed a long intensive treatment. Clarification is needed to better tailor treatment duration to the severity of the patients' disorders.

The non-randomization of the participants and non-blinding of raters are the main limitations of the study. No manual was used and as the treatment was not monitored; it remains unclear which specific factors contributed to the outcome.

Conclusion

The intensive day treatment programme stabilized patient functioning but did not lead to changes on personality traits for which more extended treatment might be necessary.

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References

1. Gunderson JG, Frank AF, Ronningstam EF, Wachter S, Lynch VJ, Wolf PJ. Early discontinuance of borderline patients from psychotherapy. J Nerv Ment Dis 1989;177:38–42.
2. Kelly T, Soloff PH, Cornelius J, George A, Lis JA, Ulrich R. Can we study (treat) borderline patients? Attrition from research and open treatment. J Personal Disord 1992;6:417–33.
3. Bateman A, Fonagy P. Effectiveness of partial hospitalization in the treatment of borderline personality disorder: a randomized controlled trial. Am J Psychiatry 1999;156:1563–9.
4. Karterud S, Pedersen G, Bjordal E, Brabrand J, Friis S, Haaseth O, et al. Day treatment of patients with personality disorders: Experiences from a Norwegian treatment research network. J Personal Disord 2003;17:243–62.
5. Wilberg T, Karterud S, Urnes O, Pedersen G, Friis S. Outcomes of poorly functioning patients with personality disorders in a day treatment program. Psychiatr Serv 1998;49:1462–7.
6. Karterud S, Urnes O. Short-term day treatment programmes for patients with personality disorders. What is the optimal composition? Nord J Psychiatry 2004;58:243–9.
7. American Psychiatric Association. Practice guideline for the treatment of patients with borderline personality disorder. Am J Psychiatry 2001;158:1–52.
8. Bateman A, Fonagy P. Psychotherapy for borderline personality disorder, mentalization-based treatment. New York: Oxford University Press; 2004.
9. Clarkin J, Yeomans F, Kernberg OF. Psychotherapy of borderline personality. New York: Wiley; 1999.
10. Young JE, Klosko JS, Weishaar M. Schema therapy: A practitioner's guide. New York: Guilford Publications; 2003.
11. American Psychiatric Association. Diagnostic and statistical manual of mental disorders, 4th edition. Washington, DC; 1994.
12. First. MB, Spitzer RL, Gibbon M, Williams JB. The structured clinical interview for DSM-III-r personality disorders (SCID-II): Part I. Description. J Personal Disord 2006;9:83–91.
13. Present State Examination, Short version for clinical use. American Psychiatric Press, Inc; 1994.
14. The ICD-10 classification of mental and behavioural disorders. Geneva: World Health Organization; 1992.
15. Derogatis LR. SCL-90-R administration, scoring & procedures, Manual-II; 1983.
16. Karterud S, Friis S, Irion T, Vaglund P. A SCL-90-R derived index of the severity of personality disorders. J Personal Disord 1995;9: 112–23.
17. Clark AW. The Personality and Social Network Adjustment Scale. Hum Relat 1968;21:85–96.
18. Horowitz LM, Rosenberg SE, Bartholomew K. Interpersonal problems, attachment styles, and outcome in brief dynamic psychotherapy. J Consult Clin Psychol 1993;61:549–60.
19. Horowitz LM, Rosenberg SE, Baer BA, Ureno G, Villasenor VS. Inventory of interpersonal problems: Psychometric properties and clinical applications. J Consult Clin Psychol 1988;56:885–92.
20. Alden LE, Wiggins JS, Pincus AL. Construction of circumflex scales for the Inventory of Interpersonal Problems. J Person Assess 1990;55:521–36.
21. Battle CC, Imber SD, Hoehn-Saric R, Stone AR, Nash EH, Frank JD. Target complaints as criteria of improvement. Am J Psychother 1966:184–92.
22. Hilsenroth M, Ackerman S, Blagys M, Baumann B, Baity M, Smith S. Reliability and validity of DSM-IV axis V. Am J Psychiatry 2000;157:1858–63.
23. Pedersen G, Hagtvet KA, Karterud S. Generalizability studies of the Global Assessment of Functioning-Split version. Compr Psychiatry 2007;48:88–94.
24. Cohen J. Statistical power analysis for the behavioral sciences. 2nd edition. Hillsdale, NJ: Lawrence Earlbaum Associated; 1988.
25. Luborsky L, Mintz J, Auerbach A, Christoph P, Bachrach H, Todd T, et al. Predicting the outcome of psychotherapy, findings of the Penn Psychotherapy Project. Arch Gen Psychiatry 1980;37: 471–81.
26. Gitlin JT, Swendsen J, Heller TL, Hammen C. Relapse and impairment in bipolar disorder. Am J Psychiatry 1995;152: 1635–40.
27. Fahy TA, Russel GFM. Outcome and prognostic variables in bulimia nervosa. Int J Eating Disord 1993;14:135–45.
28. Fonagy P, Gergely G, Elliot J, Target M. Affect regulation, mentalization and the development of the self. New York: Other Press; 2002.

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