

Two studies on the effectiveness of Transactional Analysis Psychotherapy in an inpatient setting.

© Moniek Thunnissen, PhD, MD, TSTA Psychotherapy

In this lecture I will present two studies on the effectiveness of TA Psychotherapy in an inpatient setting.

Long-term prognosis of and aftercare after short-term inpatient psychotherapy for personality disorders.

This first study was performed in the years 2000-2007 and in it I explored the long term results of a 3 months inpatient program, based on TA Psychotherapy.

Background of the 3 months TA program in De Viersprong

The inpatient program in Center of Psychotherapy 'De Viersprong' in Halsteren, the Netherlands, has been developed in 1979 for patients with personality disorders. At that time, several psychiatric hospitals in the Netherlands had inpatient or day-treatment programs for patients with personality disorders and comorbid Axis I disorders, mostly depressive or anxiety disorders. Most patients admitted to these programs had unsuccessful outpatient psychotherapy first. In general those programs had no limitation in time; the median length of stay was 9-12 months during which an integrated treatment program within a group and a therapeutic milieu aimed towards structural personality change. Research (Bolten, 1984) showed that a certain number of patients dropped out from those programs but nevertheless improved substantially at follow-up. This was the reason a short-term inpatient program was developed with duration of 3 months. As the short duration of this program asked for an active treatment modality involving the participation of the patients, transactional analysis was chosen as the preferred model for this program.

Patients with personality disorders

Patients with personality disorders often had a traumatic childhood:

- Early death of one of the parents
- Parents need a lot of caring of the child (parentification)
- Neglect, abuse (physical, emotional or sexual)
- handicap of the him- or herself or a sibling
- Often also talents present

They made early "survival decisions" and often had a quite successful life with them. But, in the end these decisions had a contra-productive effect and resulted in problems in relationships and in work.

Content of the TA Program

As 3 months is not a very long period for psychotherapy, the TA Psychotherapy Program in the Viersprong is quite intense. It consists of different forms of therapy:

- group psychotherapy
- different non-verbal therapies
- sociotherapy
- in a therapeutic milieu
- Transactional Analysis as method of psychotherapy and language

When a patient is admitted he or she makes a treatment contract after several days of introduction in the group and all the therapies. In this contract the focus of the repetitive problems, which the patient meets in his life, is stated with a decision of how to change this into a more autonomous and healthy life.

An example of a contract is: *"I leave my loophole, I become friends"* in a patient whose father was in the army and with whom he had an authority conflict since his youth what kept him from having intimate relationships with women and men. In the next three months the contract is leading in all the interactions: in the psychotherapy group sessions where the rededication model is used to change early decisions; and also in the non-verbal therapies.

One of the non-verbal therapies is archery where patients learn to experiment with safety and aggression,

with aiming and succeeding, with using strength and precision. Another therapy is puppet play where patients create a doll that often symbolises a non-acknowledged part of their self like the little girl or the macho-man. In the house where the patients live together, cook their meals and spent the evenings with group members, nurses attend the meals, discuss the weekends which are mostly spent outside the hospital, and hold daily contract meetings in which each patient evaluates together with the group members how he or she worked that day on the therapeutic goals stated in the contract.

The treatment groups, consisting of eight patients, are half-open, which means that every six weeks four out of eight patients end their treatment and four new patients are admitted, so the group consists of eight patients again.

Background of this research

At the moment of this study, the program already functioned during more than 20 years; well over 600 patients finished the program successfully: 75% of the patients showed symptomatic improvement. Nevertheless, only 33% of the patients were working and nearly 40% of them still received psychotherapeutic treatment at follow-up after one year (SWOPG, 2002). This result was confirmed in a pilot study we did among ex-patients of the program (Thunnissen, Duivenvoorden, & Trijsburg, 2001): patients showed symptomatic improvement, but often still received psychotherapeutic treatment and had difficulties in finding work or, if working, handling stressful situations.

Research questions

In this study we had two research questions:

- Does a specific method of aftercare promote the functional improvement of patients, especially: do more people have a job 2 years after the program? To answer this question, we performed a randomised clinical trial into two methods of aftercare.
- Does cluster personality disorder predict the effect of the treatment?

Design of the aftercare

The total group of 128 patients was randomised in 2 groups:

One group of 64 patients received, after the primary treatment of 3 months as described above, a **Reintegration training**. This training consisted of 6 half days of three hours, monthly between 3 and 9 months after the end of the program. Three afternoons were focussed on work, and three on (social) relationships.

The other group of 64 patients received **Booster sessions**: two days, after 3 and 9 months, with the same staff, and the same program.

Subjects and methods

Patients

On average, 50% of the patients applying for treatment in the TA-program were admitted. Selection criteria were longstanding personality problems, often second- or third degree injunctions, and unsuccessful previous psychotherapeutic treatment(s). Additionally, patients had to be motivated and willing to sign a treatment-contract, and have sufficient ego strength to participate in an intensive psychotherapeutic program. The majority of patients used no medication; if medication was used, in most cases it involved antidepressants. Exclusion criteria were: substance use disorder, history of psychosis, and other severe disorders like depression or acute anxiety disorder that could potentially interfere with the treatment.

Nearly all the patients had a personality disorder, mainly cluster C, B and personality disorder NOS - Not Otherwise Specified. This is an identification of personality disorders using the Diagnostic and Statistical Manual DSM system, whereby cluster A points at the eccentric disorders (paranoid, schizoid and schizotypal), cluster B to the dramatic (histrionic, narcissistic, borderline and antisocial), cluster C to the anxious (avoidant, dependent and obsessive-compulsive) and NOS to those who suffer from longstanding personality problems and show characteristic of different personality disorders without meeting one of the earlier mentioned diagnoses. Furthermore, they often had a diagnosis on Axis I, mainly anxiety or depressive disorders. The majority of patients had received psychotherapeutic treatment in the past, mostly as outpatients, but 10-15% of patients had been admitted to a mental hospital or had received day-treatment.

Outcome assessment

Symptoms were measured using the Symptom Check List (SCL-90 (Derogatis, 1977; Arrindell & Ettema, 1981) and expressed in terms of the Global Severity Index (GSI, range 0 to 4). The reliability of the SCL-90 is good (Cronbach's $\alpha = 0.97$, test-retest reliability ranging from 0.78 to 0.91, depending on the sample).

Having a paid job, absence from work and impediments at (paid) work were measured using the Health and Labour Questionnaire (Hakkaart-van Roijen, Essink-Bot, Koopmanschap, Bonsel & Rutten, 1996; Hakkaart-van Roijen, van Straten, Donker, 2002). Employment was defined as having a paid job, irrespective of the number of hours. The HLQ is a validated instrument for collecting data on productivity losses. In this study, we applied three modules of the HLQ, one on absence from work, and two on impediments at work: reduced efficiency at work and difficulties with job performance respectively. Absence from work during the two weeks preceding the interview was measured in half-days; any absence of a half day or more was taken as absent. Work impediments (e.g. having problems in concentrating or in making decisions, working more slowly, having to isolate oneself, postponing work, having others do one's

own work) were rated as follows, 0 = no impediments, 1 = some impediments, 2= serious impediments.

Baseline characteristics of the patients were measured at intake with a self-report questionnaire (biographical data, earlier psychotherapeutic treatment, educational level). Personality disorders were measured using the Structured Interview for DSM-IV Personality disorders (SIDP-IV) (Pfohl, Blum & Zimmerman, 1995). Axis-I diagnoses were based on clinical assessments.

Procedure

In the first week of the primary treatment, patients were requested to provide written informed consent to participate in the study. At the end of the primary treatment patients were randomised to either the re-integration training program or booster sessions; the randomisation was performed by an independent site per group of 4 patients. We established 20 groups of 2x4 patients: 10 groups for re-integration training and 10 groups for booster sessions. The aftercare started 3 or 4 ½ months after the primary treatment.

Measurement took place at the start (baseline) of the primary treatment, at the start of aftercare (6 months after the start of primary treatment) and at the end of aftercare (12 months), and at follow-up (24 months).

Statistical analysis

The study was powered to detect 'moderate differences' of 0.5 effect size (Cohen, 1988) on the outcome 'having a paid job' with β at 0.80 and $\alpha = 0.05$, two-tailed. The statistical analysis was based on the intention-to-treat principle. Logistic regression analysis was applied with binary outcome variables i.e. having paid work (0=no, 1=yes), absence from work (0=not absent, 1=absent) and impediments at work (0=no impediments; 1=impediments). In the logistic regression analyses, the odds ratio (OR) was used as a measure of performance; in the case of linear regression analysis the unstandardised regression coefficient (b) was used as the measure of importance. ANCOVA was used to test the statistical probability of a difference between the two conditions in terms of severity of symptoms. T-tests for two independent samples were applied with continuous data in order to detect statistical differences.

Comparisons between the re-integration training program and booster sessions were adjusted by multivariate modelling of the following variables: sex, type of personality disorder, having paid work at baseline, severity of symptoms in the period before the start of aftercare, psychotherapeutic help in the two years before baseline and participation in aftercare. All analyses were performed following the CONSORT statement (Moher, Schulz, & Altman, 2001).

Results on the first research question: do more people have a job 2 years after the program?

All patients participating in the treatment between May 1999 and December 2001 (n = 160) were asked to provide written informed consent to participate in the

aftercare study. Of the original 160 patients, 32 did not participate: 7 patients refused to cooperate, and 25 patients dropped out of the inpatient program. Comparison between the 25 dropouts and the 128 patients included in the study group showed that the percentage of males was higher in the dropout group (66.7%) than in study patients (34.4%; $\chi^2 = 9.86$; $p < 0.01$). Dropouts were significantly older (40.3 years \pm 9.6) than study patients (35.6 years \pm 8.1; $t = 2.6$; $df = 151$; $p < 0.01$).

Compliance

On average, 64.6% of patients attended the 6 half-day sessions in the re-integration training program. Attendance decreased from 78.1% in the first session to 56.3 in the fifth and 64.6% in the sixth session. In the booster sessions, 90.6% of the patients participated on the first day and 76.6% on the second day (average 83.6%). Participation was significantly higher in the booster sessions ($t=3.20$, $df=126$, $p=0.002$, two-tailed).

Baseline measurements

In this study, finally 128 patients participated: 44 men (34.4%) men and 84 (65.6%) women.. The average age was 35.6 years (SD=8.1, range 20-53 years). Their educational level was medium to high. 90.6% of the patients were diagnosed with at least one Axis-I disorder the symptom level. They mainly suffered from anxiety and/or depression.

97% of the patients had a personality disorder, mainly cluster C and cluster B.

They often had unsuccessful outpatient psychotherapy before the inpatient program: 93.0% of the patients had undergone psychotherapeutic treatments during the two years preceding admission to the inpatient treatment, mostly as outpatients; 9.4% had been admitted to a mental hospital and 3.9% had received day-treatment. 71.1% of the patients were employed; 50% were living alone and 19.5% had children.

Results 1: Response on the questionnaires

The response on the questionnaires was outstanding:

- admission: 128 patients; 100%
- discharge: 128 patients; 100%
- start aftercare: 122 pt 95%;
- End aftercare: 116 pt 90%;
- follow-up (2 years): 108 pt 84%

This means that the data in this research are reliable.

Results 2: Adherence in the aftercare.

Here we see the first huge difference; the adherence in the booster sessions was much better (84% of the patients participated) compared to the adherence in the reintegration training (65% adherence).

Results 3: How many people had a job after 2 years?

As 'getting back to work again' was one of the main goals of the reintegration training, we were very curious to find out what the results in this area were.

We were surprised to find out that there was a big difference –in the opposite direction as we expected: the booster sessions had better results regarding having a job compared to the reintegration training!

On admission the patients who had a job worked in general 32.7 hours a week (5-40 hours); two years later at follow-up patients worked 30.0 hours a week (5-40 hours).

The percentage of patients with a paid job did not change for patients in the re-integration training program (75.9% and 75.9% respectively). The percentage increased however for those attending the booster sessions from 64.2% to 86.8%. The difference between the two treatments is significant only at the end of aftercare.

Looking more closely to what made the difference, we saw the results shown in Figure 1.

As shown in Figure 2, the number of people who had a job before the TA Program and after 2 years was about the same in the two conditions: about 60%.

The number of people without a job before and after was also the same: 12-14%. The largest difference was in the number of people who lost their job after two years; and in the number of people who found a job.

As shown in Figure 3, in the reintegration training more people seemed to lose their job; in the booster sessions more people found a job!

Table 1: Response on the questionnaires

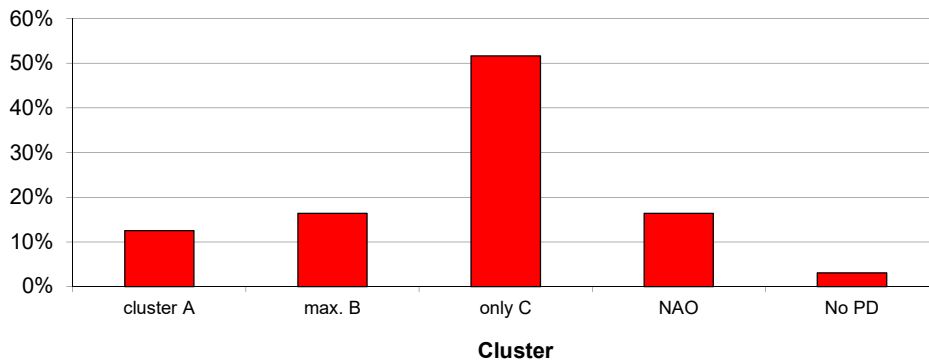


Figure 1: Percentage with paid job

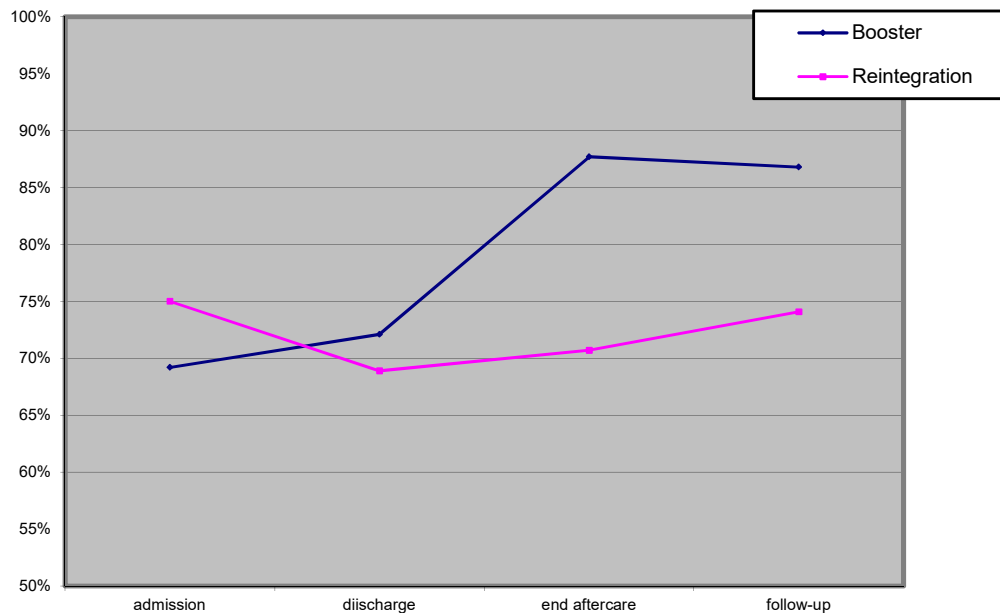


Figure 2: Numbers with paid job

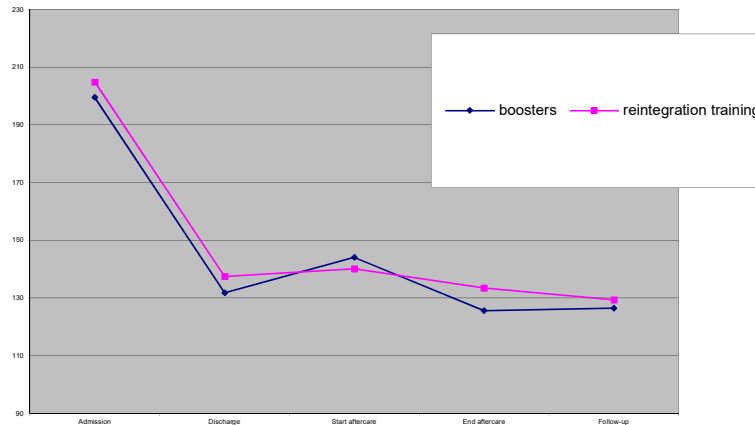
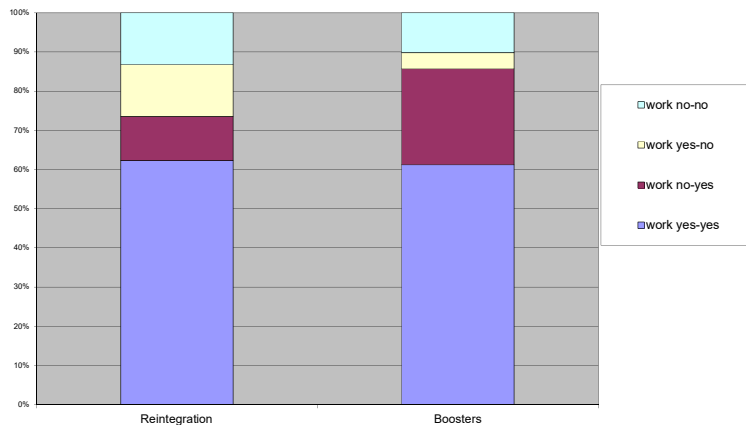


Figure 3: Work comparison – Reintegration v Booster



Results: symptom level

The symptomatic change was impressive for both conditions. The main part of this improvement was reached during the 3 months inpatient TA Program.

Conclusions

To summarise the main conclusions:

- Both types of aftercare stabilise the symptomatic improvement and decrease the psychotherapeutic treatment 2 years after the inpatient program substantially
- Boosters score better regarding:
 - - adherence: 84% versus 65% in the reintegration training
 - - work: 87% versus 76% in the reintegration training.

A possible explanation of this difference is that continuity in care in the booster sessions with the same

program and same therapists seems to be more effective than reintegration training with a different program and new therapists. Another aspect is that more people than expected had a job already which made ‘reintegration into work’ less necessary for them.

Results on the second research question: Does cluster personality disorder predict the effect of the treatment?

As you can see in Figure 4, different personality disorders have a different pattern of symptomatic improvement:

- cluster A slowly and gradually
- cluster B rapidly with relapse
- in the end we see about the same improvement in each cluster

After two years all patients showed the same symptomatic improvement, even cluster A patients! Possible explanations are:

- other variables like motivation, ego strength and psychological mindedness are more important
- DSM-IV TR classification system differentiates insufficiently

Second Study: SCEPTRE study (Study of Cost-Effectiveness of Psychotherapeutic Treatment).

This study was a multi-centre study with 900 patients, conducted in 6 different hospitals in the Netherlands. One of the participating programs involved the 3 months inpatient program based on Transactional Analysis, the same program I described in the first part of my lecture.

In the SCEPTRE study the results were compared between different 'dosages' of psychotherapy for the group of Cluster C patients:

- Outpatient longer than 6 months (n=68)
- Day clinic less than 6 months (n=77)
- Day clinic more than 6 months (n=74)
- Inpatient less than 6 months (n=59)
- Inpatient more than 6 months (n=93)

The TA-program was the inpatient less than 6 months program.

The treatment was 'treatment as usual'.

After 12 months we compared the results between baseline and 12 months on the GSI (symptom level) – Figure 5.

As you can see, the Effect Size of the sort-term inpatient treatment is the highest with 1.78, much higher than the other effect sizes –which are already medium (.63, .62 and .71) or high (1.06).

The conclusion of this study is:

- Patients with cluster C personality-pathology improve during psychotherapy
- Short-term inpatient programs (less than 6 months) show, after 12 months, the largest improvement, even after correction for the initial differences between patients.

Looking at the costs of the different treatment programs compared to the benefit, we found the results in Table 2.

This also shows that short-term, intensive treatment might seem expensive but the long-term benefits far outweigh the costs!

The overall conclusion is that for patients with cluster C personality disorders, short-term inpatient psychotherapy is first choice, and short-term day treatment is second choice.

Long-term treatment –either inpatient or day treatment- is not cost-effective.

The two modalities of psychotherapy in these short-term treatments were TA and Intensive Short-term Davanloo therapy.

Figure 4: Symptomatic improvement by PD Cluster

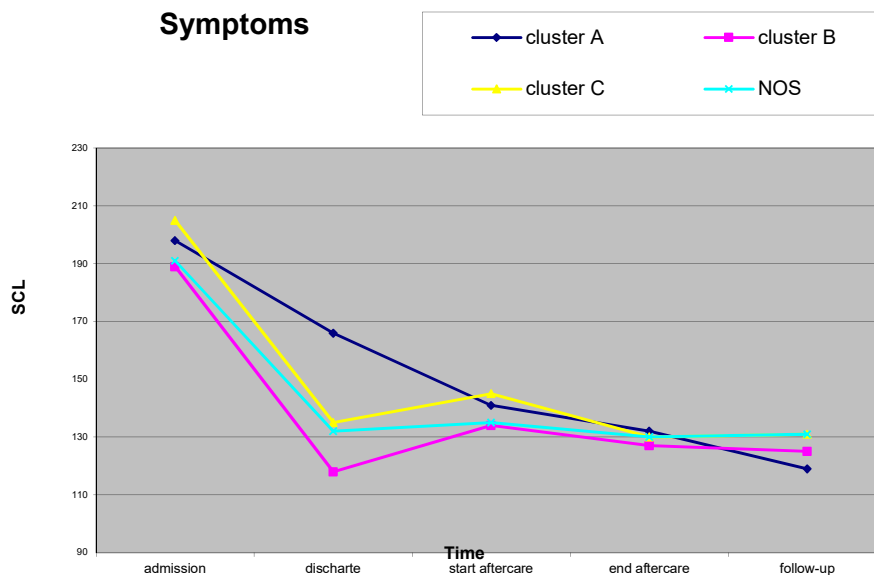


Figure 5

Uncorrected results Cluster C Symptom level (GSI)

Unpublished – Do not quote

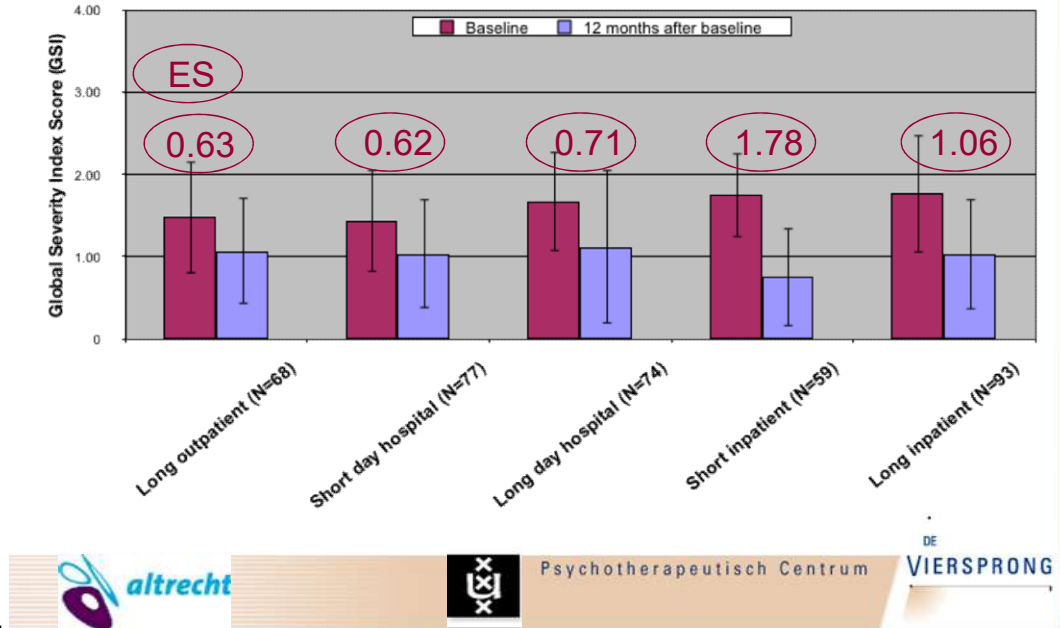


Table 2

What does a recovered patient cost?



Psychotherapy dosage	% recovery after 12 mnth	Costs (€)
Longterm outpatient	19%	64.735
Shortterm day clinic	26%	46.131
Longterm day clinic	37%	45.442
Shortterm inpatient	61%	32.837
Longterm inpatient	41%	57.285



40

References

Arrindell, W. A., & Ettema, H. (1981). Dimensional structure, reliability and validity of the Dutch version of the Symptom Check List (SCL-90); results based on a phobic and a 'normal' population. (Dimensionele structuur, betrouwbaarheid en

validiteit van de Nederlandse bewerking van de Symptom Check List (SCL-90); gegevens gebaseerd op een fobische en een 'normale' populatie.). *Nederlands Tijdschrift voor Psychologie*, 36: 77-108.

- Bartak, A, Spreeuwenberg, M., Andrea, H., Holleman, L. et al. (2009). Effectiveness of different modalities of psychotherapeutic treatment for patients with cluster C personality disorders: Results of a large prospective multicentre study. *Psychotherapy and Psychosomatics*, 79: 20-30.
- Beecham, J., Slead, M., Knapp, M., Chiesa, M., & Drahorad, C. (2006). The costs and effectiveness of two psychosocial treatment programmes for personality disorder: a controlled study. *European Psychiatry*, 21, 102-109.
- Berne, E. (1961) TA in Psychotherapy. New York: Grove Press.
- Bolten, M P. (1984). Short-term residential psychotherapy: psychotherapy in a nutshell. *Psychotherapy & Psychosomatics*, 41(3):109-115.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences (2nd ed.)*. New Jersey: Lawrence Erlbaum.
- Cornell, W.F. (2008). Explorations in transactional analysis. The Meech Lake papers. Pleasanton: TA Press.
- Crits-Christoph, P., Baranachie, K., Kurcias, J., Beck, A. T., Carroll, K., Perry, K., Luborsky, L., McLellan, A. T., Woody, G. E., Thompson, L., Gallagher, D., & Zitrin, C. (1991). Meta-analysis of therapist effects in psychotherapy outcome studies. *Psychotherapy Research*, 1, 81-91.
- Derogatis, L. L. (1977). *SCL-90 administration, scoring and procedure manual*. Baltimore: John Hopkins University Press.
- Emmelkamp, P. M. G. (2004). Behavior therapy with adults. In: Lambert, M. J., editor. *Bergin and Garfield's Handbook of Psychotherapy and Behavior Change*. New York: Wiley, 393-446.
- Erskine, R.G. (1997). The therapeutic relationship: Integrating motivation and personality theories. In R.G. Erskine: *Theories and methods of an integrative transactional analysis: A volume of selected articles*, pp.7-19. San Francisco: TA Press.
- Hargaden, H. & Sills, C. (2002). *Transactional analysis: A relational perspective*. Hove, England: Brunner/Routledge.
- Hakkaart-van Roijen, L., Essink-Bot, M. L., Koopmanschap, M. A., Bonsel, G., & Rutten, F. F. (1996). *Labor and health status in economic evaluation of health care. The Health and Labor Questionnaire*. International Journal of Technical Assessment and Health Care, 12: 405-15.
- Hakkaart-van Roijen, L., Straten, A. van, & Donker, M. (2002). Manual Trimbos/iMTA Questionnaire for Costs associated with Psychiatric Illness (TIC-P). Rotterdam: iMTA.
- Hollon, S. D., & Beck, A. T. (2004). Cognitive and cognitive behavioral therapies. In: Lambert, M. J., editor. *Bergin and Garfield's Handbook of Psychotherapy and Behavior Change*. New York: Wiley, 447-492.
- Khalil, E. (2007). Transactional Analysis: A scoping exercise for evidence of outcomes. Report prepared for the Berne Institute.
- Kopelowicz, A., Wallace, C. J., & Zarate, R. (1998). Teaching psychiatric inpatients to re-enter the community: a brief method of improving the continuity of care. *Psychiatric Services*, 49, 1313-1316.
- Lambert, M. J., & Bergin, A. E. (1994). The effectiveness of psychotherapy. In: Bergin, AE, Garfield SL, editors. *Handbook of psychotherapy and behavior change (4th ed)*. New York: Wiley; 143-189.
- Lash, S. (1998). Increasing participation in substance abuse aftercare treatment. *American Journal of Drug and Alcohol Abuse*, 24, 1-36.
- Leichsenring, F. D., & Leibling, E.D. (2003). The effectiveness of psychodynamic therapy and cognitive behavior therapy in the treatment of personality disorders: a meta-analysis. *American Journal of Psychiatry*, 160, 1223-1232.
- Leon, G. de. (1991). Aftercare in therapeutic communities. *International Journal of Addiction*, 25, 1225-1237.
- Moher, D., Schulz, K. F., Altman, D. G. (2001). The CONSORT statement: revised recommendations for improving the quality of reports of parallel-group randomised trials. *The Lancet*, 357, 1191-1194.
- Novey, T. (1999). The effectiveness of Transactional Analysis. *Transactional Analysis Journal*, 29 (1), 18-30.
- Novey, T. (2002). Measuring the effectiveness of Transactional Analysis: an international study. *Transactional Analysis Journal*, 32 (1), 8-24.
- Ohlson, R., Ganley, R., Devine, V. & Dorsey, G. (1981). Long term effects of behavioural versus insight-oriented therapy with inpatient alcoholics. *J. of Consulting and Clinical Psychology*, 49 (6), 866-877.
- Ohlsson, T. (2002). Effects of transactional analysis psychotherapy in therapeutic community treatment of drug addicts. *Transactional Analysis Journal*, 32(3), 153-177.
- Perry, J. C., Banon, E., & Ianni, F. (1999). Effectiveness of psychotherapy for personality disorders. *American Journal of Psychiatry*, 156, 1312-1321.
- Pfohl, B., Blum, N., & Zimmerman, M. (1995). *Structured interview for DSM IV personality SIDP IV*. Iowa City, IA. (Translated in Dutch by De Jong, C., Derks, F., Oel, C. van, & Rinne, T. (1996). *SIDP-IV gestructureerd interview voor de DSM IV persoonlijkheidsstoornissen*. St.Oedenrode: Author.
- Piper, W.E., Rosie, J. S., Azim, H. F., & Joyce, A. C. (1993). A randomized trial of psychiatric day treatment for patients with affective and personality disorders. *Hospital and Community Psychiatry*, 44, 757-763.
- Skodol, A. E., Pagano, M. E., Bender, D. S., Shea, M. T., Gunderson, J. G., Yen, S., Stout, R. L., Morey, L. C., Sanislow, C. A., Grilo, C. M., Zanarini, M. C., & McGlashan, T. H. (2005). Stability of functional impairment in patient with schizotypal, borderline, avoidant, or obsessive-compulsive personality disorder over two years. *Psychological Medicine*, 35, 443-451.
- Stewart, I. & Joines, V. (1987). TA Today. Nottingham: Lifespace Publishing.
- SWOPG (2002). Effectiveness Research in Inpatient Psychotherapy 1997-2000. Based on the Standardised Evaluation Project STEP (Resultaatonderzoek in de Klinische Psychotherapie 1997-2000. Op basis van het Standaard Evaluatie Project STEP). Noordwijkerhout: DrunoDruk.
- Thunnissen, M. M., Duivenvoorden, H. J., & Trijsburg, R. W. (2001). Experiences of patients after short-term inpatient transactional analysis psychotherapy. *Transactional Analysis Journal*, 31, 122-128.
- Thunnissen, M.M., Duivenvoorden, H., Busschbach, J. Hakkaart-van Roijen, L., Tilburg, W. van, Verheul, R. & Trijsburg, R.W. (2008). A randomized clinical trial on the effectiveness of a re-integration training program versus booster sessions after short-term inpatient psychotherapy. *Journal of Personality Disorders*,
- Whisman, M. A. (1990). The efficacy of booster maintenance sessions in behaviour therapy: review and methodological critique. *Clinical Psychological Review*, 10, 155-170.