The clinical effectiveness of haptotherapy in routine practices

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Background
Despite the widespread application of haptotherapy in The Netherlands, there is a lack of evidence regarding its effectiveness. The aim of this study was to further explore its effect in a convenience sample of clients from first line clinical practices.

Method
The Vereniging van Haptotherapeuten (Dutch Association of Haptotherapists) invited experienced member therapists in first line practices to participate in the study. There was no standard treatment manual and the therapists were not given specific training for the purposes of the study. Patients were recruited by 47 haptotherapists throughout the Netherlands between 2010 and 2011. Each therapist was asked to recruit a maximum of 10 patients on the basis of voluntary participation, resulting in a total of 257 patients at time 1 (pre-intervention). At time 2 (post-intervention), 93 of the 257 patients (35,8%) had dropped out. The mean age of the 257 patients was 43.3 years (sd=11.8, range = 19 to 82). The majority was female (74.3%), while 25.3% was at sick leave. More than half (52.5%) had higher education and 68.5% had paid jobs.

Measures
Clients completed several pre- and post-intervention questionnaires. The subscales 'depression', 'anxiety' and 'somatic complaints' of the *Symptom Check List 90* (SCL-90) (Derogatis, 1977), measuring psychological and somatic complaints, were the primary dependent variables, while secondary measures included psychological mindedness (*Balance Index of Psychological Mindedness*, Nyklíček & Denollet, 2009), autonomy connectedness (*Autonomy Connectedness Scale 30*, Bekker & Van Assen, 2006), body connection (*Scale of Body Connection,* Price & Thompson, 2007) and touch (*Body Investment Scale,* Orbach & Mikulincer, 1998).

Statistical Analysis
Both intention-to-treat (ITT) and completer analyses were conducted. For ITT analyses, patients without a post-intervention assessment were given the pre-intervention score as their final score, and were thus considered to be unchanged. For the completer analysis, only patients with both a pre- and post-intervention score were included. Paired samples *t*-tests using the stepwise Bonferroni procedure to adjust for multiple comparisons were performed. All statistical tests were conducted using a two-tailed alpha level of 5%. As a measure of change, uncontrolled effect sizes were calculated using Cohen's *d* statistic. *ES* above 0.2 are considered as 'small', above 0.5 as 'medium' and above 0.8 as 'large' (Cohen, 1988).
Jacobson's analysis of clinical significance (e.g., Jacobson & Truax, 1991) provided further information about the effects of therapy for individual patients. For this purpose a reliable change index (RCI) and a cut-off criterion score between the normal (healthy) population and the dysfunctional population were calculated to establish significant change and recovery. Analyses of clinical significance were carried out only on those patients who had pre-intervention scores on the SCL-90 above the cut-off criterion, because it is otherwise impossible to define patients as recovered, and very difficult to show reliable improvement if scores are already in the functional range.
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Results
Group analyses. With the exception of two subscales of the Autonomy Connectedness Scale, significant differences between pre- and post-intervention, using stepwise-Bonferroni corrections for multiple comparisons, were found on all other dependent measures. With regard to the primary outcome measures of the intention-to-treat analyses, i.e. SCL-90 total score and the SCL-90 subscales 'depression', 'anxiety' and 'somatic complaints', the largest effect size was for the subscale 'depression', *ES* = .61, indicating medium change. Other effect sizes ranged from .38 to .41, which is in the range of small changes.
Changes in primary outcome measures in the completer analyses were more robust than in the ITT analyses. All effects were in the medium range. For the secondary outcome measures, changes were comparable with the ITT analyses. All effect sizes were small to medium.
More than 75% of the completers showed significant improvement on the SCL-90, while the overall recovery rate was more than 50%.
Conclusion: The results suggest that haptotherapy is effective in the treatment of psychological and somatic complaints. Due to the exploratory uncontrolled nature of the study, more research is required to support the effectiveness of haptotherapy compared to control conditions.

Analysis of clinical significance. Improvement on the SCL-90 total score was calculated to be a change of at least 25 points. Men were classified as *recovered* if they showed a post-intervention score of 136 or lower *and* an improvement of 25 points or more. Women were classified as *recovered* if they showed a post-intervention score of 148 or lower *and* an improvement of 25 points or more. Of the 86 female patients with dysfunctional pre-intervention scores >148, improvement was observed in 65 (75.6%) patients of whom 48 (55.8%) were also recovered. Of the 25 male patients with a pre-intervention score of >136, a change of at least 25 points was observed in 19 patients (76.0%) of whom 14 (56.0%) were also recovered. The overall recovery rate of all patients was 55.9% (62 of 111).

Conclusion

The results suggest that haptotherapy has at least a small to medium effect on the psychological and somatic complaints of the patients. According to the ITT analyses, this study showed significant medium changes in depression and small changes on the other primary outcome measures. The effect sizes of the completers on the SCL-90 were all in the medium range. On the secondary outcome measures, small to medium changes were found. Of all secondary outcome measures, insight in one's internal psychological phenomena showed the largest improvement.

More robust effect sizes of completers, in comparison with ITT, were due to the fact that the post-intervention scores of the drop-outs in the ITT analyses were equal to their pre-intervention scores. Lower effect sizes will be the consequence of the high drop-out percentage (36%). While this suggests that patients did leave treatment, a small number of therapists failed to return any post-intervention questionnaires for reasons unknown. Actual drop-out rate is therefore thought to be lower than the reported 36%. The effect sizes found in the present study were small to medium. Other studies on the effect of psychological therapies in routine practices generally found medium effect sizes (Westbrook & Kirk, 2004; Wiersma, Greeven, Berretty, Krijn & Emmelkamp, 2008). This is in correspondence with the present study. More than 75% of the completers showed reliable improvement. The overall recovery rate was 55.9%. The results for men and women did not differ substantially, although the number of men in this study was small.

Limitations

This study had a number of limitations. First, research in clinical practice has low internal validity. There is uncertainty about the exact protocol of the therapy. The haptotherapists performed their therapy 'as usual' and did not follow a research protocol. It is also unknown whether the patients had some other treatments besides haptotherapy, i.e. medication or psychotherapy. A major limitation is that the number of sessions and main complaints are unknown. It is therefore unknown whether more sessions resulted in better outcome. Furthermore, knowledge with regard to major complaints may result in more detailed conclusions with regard to who benefit the most from haptotherapy and those who do not. Another limitation was that this study lacked comparison with other conditions. It is therefore impossible to draw conclusions with regard to spontaneous recovery or its relative effectiveness compared to other types of treatment. Lasting effects of haptotherapy after the postintervention measurement are also unknown.

In correspondence with the only other unpublished study that investigated psychophysical complaints (Klabbers, 2010), the present study supports the effectiveness of haptotherapy in a convenience sample of patients in routine practices within the limits of an uncontrolled design.

Literature

Bekker, M.H.J., & van Assen, A.L.M. (2006). A short form of the autonomy scale: Properties of the Autonomy-Connectedness Scale (ACS-30). *Journal of Personality Assessment, 86*, 51-60.

Cohen, J. (1988). *Statistical power analyses for the behavioral sciences (2nd ed.).* Hillsdale: Erlbaum.

Derogatis, L.R. (1977). *SCL-90-R, administration, scoring & procedures manual-I for the R(evised) version.* Baltimore: John Hopkins University School of Medicine.

Jacobson, N.S. & Truax, P. (1991). Clinical significance: A statistical approach to defining meaningful chance in psychotherapy research. *Journal of Consulting and Clinical Psychology, 59*,12-19.

Klabbers, G. (2010). *4DKL onderzoek haptotherapie*. Report. Uitgeverij Haptotherapie Nederland.

Nyklíček, I. & Denollet, J. (2009*).* Development and evaluation of the Balanced Index of Psychological Mindedness (BIPM). *Psychological Assessment, 21*, 32-44.

Orbach, I. & Mikulincer, M. (1998). The Body Investment Scale: Construction and validation of a body experience scale. *Psychological Assessment,10*, 415-425.

Price, C.J. & Thompson, E. (2007). Measuring dimensions of body connection: Body awareness and bodily dissociation. *The Journal of Alternative and Complementary Medicine, 13*, 943-953.

Westbrook, D. & Kirk, J. (2004). The clinical effectiveness of cognitive behaviour therapy: outcome for a large sample of adults treated in routine practice. *Behaviour Research and Therapy, 43*, 1243-1261.

Wiersma, J., Greeven, A., Berretty, E., Krijn, M. & Emmelkamp, P. (2008). De effectiviteit van Virtual Reality Exposure Therapy voor hoogtevrees in de klinische praktijk (Effectiveness of Virtual Reality Exposure Therapy for fear of heights in clinical practice). *Gedragstherapie, 41*, 253-259.