Haptotherapy for children and parents: The potential effects and how it works
A single-case sub-study and a qualitative sub-study
Roos Terpstra

Abstract

The purpose of this study is to investigate the potential effects of haptotherapy, and how it works for children and their parents.

1. To what extent does the affective contact of parent and child change after having followed haptotherapy for children and parents (HCP)? 2. To what extent does the problematic behaviour of the child change after following HCP? 3. To what extent does the parents’ acceptance change after following HCP? 4. To what extent does the parenting stress change after following HCP? 5. Exactly how and why is HCP effective?

In the study at hand, a single-case based design and a qualitative design were used. In sub-study 1 the effects of the intervention were measured for an 11-year-old boy with angry outbursts. Data were collected by daily measurements (acceptance, frequency, intensity and duration of angry outbursts), weekly measurements (affective contact), pre, interim and post measurements (parenting stress, problem behavior) and interviews with mother and the therapist. Sub-study 2 involved a qualitative study in the form of semi-structured in-depth interviews. In order to gain more insight into HCP methodology and its effect on parenting stress and child behavior, interviews were held with four participants who had followed and completed haptotherapy for children and parents up to a year ago.

Data analysis of study 1 showed an increase in affective contact, less frequency and intensity, a shorter duration of daily angry outbursts and a decrease in behavioral problems and parenting stress. Mother’s acceptance remained constant. The decrease in frequency of the daily angry outbursts was followed by an increase in mother’s affective contact with herself. Moreover, all the respondents of study 2 had a positive experience with haptotherapy and most of the problems were resolved. The conclusion of the study in question is that haptotherapy appears to be a promising treatment for children with mild problem behavior and their parents. There are indications for hypotheses that can be researched in further studies.

Keywords: Haptotherapy for children and parents; affective contact; angry outbursts.

Introduction

Haptonomy, developed in the nineteen-sixties by Frans Veldman, is a specific vision on human beings. Human emotion and human emotional experience are central to haptonomy, as well as the instinctive interaction between people and with the outside world (Van Banning et al., 2011). This vision of human beings is based on the premise that the body is connected to the limbic system in the brain. The limbic system is a part of the brain that is involved in emotion and emotional memory, among other things (Boot, 2014).


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Haptotherapy is based on this same vision of humanity. Haptotherapy is a type of psychosocial therapy that aims to help the client to connect with their physical and inner sense of feeling (Plooij, 2007). Affective touch and other exercises are used to stimulate the awareness of the body (physical consciousness) and through that, the awareness of the emotional experience (Boot, 2014; Klabbers et al., 2014). One form of haptotherapy is haptotherapy for children and parents (HCP). This form of treatment is similar to haptotherapy for adults, however, games are primarily used in HCP, in which both the child and the parent play an active role (Pollmann et al., 2018). HCP is suitable for parents with children up to and including 12 years of age. HCP is intended for parenting problems of minor to medium severity, unexplained somatic physical symptoms in children and/or mild externalising or internalising problem behavior in children. Affective contact with oneself and one’s environment is the key concept within both haptotherapy for adults and in HCP (Plooij & Zandvliet, 2010; Pollmann et al., 2018).

HCP strives to guide parents towards a sensitive and responsive interaction with the child, to promote the affective contact between parent and child (Pollmann et al., 2018). The assumption in this approach is that the behavioural problems of the child will decrease as the affective contact improves (Pollmann et al., 2018). Positive development in the child subsequently influences the amount of parenting stress that the parents experience (De Rooij & Gravestijn, 2017). When parents experience less stress in raising the child, they will feel better themselves. The wellbeing of the parents then also has an influence on their parenting behaviour (Sameroff, 2009).

The number of studies into the effectivity and working method of haptotherapy for adults and HCP are limited. The few studies that have been conducted seem to show promising results. However, it must be noted here that most of the study designs that have been used do not exclude alternative explanations, and thus, it cannot be stated conclusively that the determined results were in fact the result of the haptotherapy (Stams, 2011a).

Only one study has been completed on the effectiveness of HCP to date. This study was a single-case experimental study, which showed that the extent of the child’s angry outbursts and the parenting stress improved after completing haptotherapy for children and parents. (Pollmann et al., 2018). The study at hand is the second study into HCP. It focuses on the effectivity of HCP and how it works, and consists of two sub-studies. Sub-study 1 concerns a single-case experiment in which a child and its parents are followed from the situation prior to the treatment until after the treatment is concluded (n = 1) (Iversen, 2013). The objective of sub-study 1 is to study whether haptotherapy for child and parent is effective with an eleven-year-old boy, exhibiting mild externalising problem behaviour in the form of angry outbursts, and to determine how and why HCP is effective. Sub-study 2 involves a qualitative study in the form of semi-structured, in-depth interviews. To gain further insight into the methodology of HCP and its effect on parenting stress and child behaviour, interviews with participants were conducted who had received and completed haptotherapy for children and parents up until a year ago.

**Research questions**

Although affective contact and the general effect of (affective) touch have been the subject of several studies, the number of studies into the effectivity and the approach and process of haptotherapy for adults and HCP are limited. For this reason, the following study questions have been formulated:

- To what extent does the affective contact of mother and child change after following HCP?
- To what extent does the problem behaviour of the child change after following HCP?
- To what extent does parental acceptance change after following HCP?
- To what extent does parenting stress change after following HCP?
- Exactly how and why is HCP effective?

**Methods**

**Data collection**

Sub-study 1. Firstly, daily measurements were carried out by mother with regard to the child’s angry outbursts and mother’s acceptance. Mother responded to five items each day via an app. Three items measured the anger of the child: 1. How many angry outbursts took place today? 2. What was the average duration of an angry outburst today (in minutes)? 3. How intense were the outbursts (1: a little angry to 9: extremely angry)? 4. About the parent’s acceptance. A response was given to the item: ‘I accept my child as he is’. 5. An open question measuring whether anything special or unusual had happened: ‘Has anything special or unusual happened (such as illness)?’. This was done according to an ABA design (Iversen, 2013). The baseline period (A: 11 days) here was the period from the first registration with the haptotherapist until the
beginning of the treatment. The intervention period (B: 10 treatments, 78 days) was the period during which the family received therapy. Finally, measurements were taken after the last treatment (A: 10 days). Secondly, premeasurements (T0), interim measurements (T1) and post measurements (T2) were taken using a list of questions with regard to the parental stress of raising the child (PSQ; Vermulst et al., 2011) and the behavior of the child (CBCL; Verhulst & van der Ende, 2013). Thirdly, the haptotherapist filled in a list of questions after each treatment every week, with regard to the treatment forms used, the degree of affective contact of the child and the parent and the further course of the session. This list of questions was based on a code list, which was originally developed for observing film fragments of children (Pollmann, 2015). The code list includes seven items. The areas measured were: 1. presence (3 items); 2. pays attention to others’ reactions and responds to it/synchronization (2 items); 3. makes affective contact with others (2 items) (Pollmann et al., 2018). Using a five-point Likert scale, the extent to which parent and child exhibited affective contact with themselves and their environment were scored as 1: very weak or absent, and 5: strongly present (Likert, 1932). An example of an item is “There is some reciprocity in the contact.”, whereby a score of 1: means very weak or completely lacking and a score of 5: means strongly present. The higher the total score, the more affective contact was observed.

Finally, after the treatments were concluded, a series of semi-structured, in-depth interviews were conducted with the mother and the haptotherapist regarding their experiences with the haptotherapy for child and parent (HCP). The list of questions was developed based on recommendations from earlier research into HCP (Boeije, 2014; Pollmann et al., 2018). Among the questions included were such questions as: ‘What did a treatment session with the haptotherapist entail?’; ‘Did you notice a difference during the series of treatments?’ and ‘What during the haptotherapy did you find helpful for you and your child?’. The interviews were conducted by telephone and separate from the other.

Sub-study 2. The second sub-study was a qualitative study using the format of semi-structured, in-depth interviews. The questions used during these interviews were the same as those used in the closing interview of Sub-study 1 with the mother. The interviews were conducted by telephone with parents who had followed and completed HCP within the last year. In the interviews, the participants were asked about their experiences with HCP.

Analysis

Sub-study 1. Simulation Modeling Analysis and SPSS were used to answer the study questions (Borckardt, 2006; IBM., 2017). The degree of change in the number of angry outbursts, the average intensity of the angry outbursts and the average duration of the angry outbursts were calculated based on level and slope changes. The development of the affective contact of parent and child were calculated based on slope changes. Furthermore, the influence of the change in affective contact on the process of change in the angry outbursts was calculated using cross correlations between time series. In order to chart the change in the problem behaviour and parenting stress, the rough subscale scores were converted to T-scores. The Reliable Change Index (RCI) was also calculated (Yperen et al., 2017). The interviews with the mother and therapist were recorded, transcribed verbatim and analysed by means of open coding, axial coding and selective coding (Boeije, 2014).

Sub-study 2. The interviews were analysed in the same manner as the qualitative measurement of sub-study 1, using open coding, axial coding and selective coding (Boeije, 2014). Another researcher verified a part of the interviews to increase the reliability of the study.

Results

Figure 1 shows the forms of therapy used per treatment. Affective exercises refer to activities which focus on trying to feel comfortable in close proximity with others. Examples of this include sitting, lying or standing close to each other. Affective therapeutic touch is physical touch by the haptotherapist and/or the parents, intended to help the child to feel comfortable in his/her own body. (Pollmann et al., 2018).
Angry Outbursts

Table 1 shows the average values of the angry outbursts and the parents’ acceptance divided over three periods (before the therapy treatments, during the therapy and after the therapy treatments). Table 2 shows that the number of angry outbursts per day was significantly lower after completion of the treatment course than prior to treatment. The average intensity and average duration of the angry outbursts were also significantly lower after treatment. These numbers reflect medium effect sizes. Mother’s acceptance remained constant throughout the entire study. Mother accepted her son as he is.

Table 1
Averages (M) for the angry outbursts and the extent of acceptance for the baseline phase, the intervention phase, and the follow-up phase

Notes: ¹Number of angry outbursts per day during the phase in question. ²Average length of the angry outburst in minutes. ³Average intensity of the angry outburst: 1 = A little angry – 9 = Extremely angry. ⁴Acceptance: 1 = a low level of acceptance – 6 = a high level of acceptance.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Baseline phase (n length = 11)</th>
<th>Intervention phase (n length = 78)</th>
<th>Follow-up phase (n length = 10)</th>
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<tbody>
<tr>
<td></td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Number angry outbursts¹</td>
<td>1.45</td>
<td>0.81</td>
<td>0.00</td>
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<tr>
<td>Duration angry outbursts²</td>
<td>1.64</td>
<td>2.21</td>
<td>0.00</td>
</tr>
<tr>
<td>Intensity angry outbursts³</td>
<td>2.27</td>
<td>2.08</td>
<td>0.00</td>
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<tr>
<td>Acceptance⁴</td>
<td>6.00</td>
<td>6.00</td>
<td>6.00</td>
</tr>
</tbody>
</table>

Table 2
Level and slope changes for the angry outbursts and the level of acceptance by mother after HCP has started

Notes: Negative effect sizes indicate a decrease, positive effect sizes indicate an increase, r = .10 = a small effect size, r = .30 = a medium effect size, r = .50 = a large effect size, r = .70 = a very large effect size (Cohen, 1988). I Baseline phase, II Intervention phase, III Follow-up phase.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Level change</th>
<th>Slope change</th>
<th>Level change</th>
<th>Slope change</th>
<th>Level change</th>
<th>Slope change</th>
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<th>Slope change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number angry outbursts</td>
<td>Number angry outbursts</td>
<td>Duration angry outbursts</td>
<td>Duration angry outbursts</td>
<td>Intensity angry outbursts</td>
<td>Intensity angry outbursts</td>
<td>Acceptance by mother</td>
<td>Acceptance by mother</td>
</tr>
<tr>
<td></td>
<td>r</td>
<td>r</td>
<td>r</td>
<td>r</td>
<td>r</td>
<td>r</td>
<td>r</td>
<td>r</td>
</tr>
<tr>
<td>I – II</td>
<td>-.20</td>
<td>.28*</td>
<td>.05</td>
<td>-.07</td>
<td>-.03</td>
<td>.15</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>II – III</td>
<td>-.27</td>
<td>-.56**</td>
<td>.20</td>
<td>-.06</td>
<td>-.29*</td>
<td>-.29*</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>I – III</td>
<td>-.52*</td>
<td>.11</td>
<td>-.59*</td>
<td>-.48*</td>
<td>-.51*</td>
<td>.21</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Affective contact

Figure 2 shows the affective contact of parent and child. As can be seen, the affective contact of both mother and child has increased in a linear pattern from the beginning to the end of the treatment period.
Table 3 Lagged Cross-correlations per item angry outbursts and affective contact child and parent

Notes NAO = Number of angry outbursts; ACC = Affective contact child; ACP = Affective contact parent; DAO = Duration of angry outbursts; IAO = Intensity of angry outbursts.
*p < .05. **p < .01.

<table>
<thead>
<tr>
<th>Lagged Cross-correlation</th>
<th>NAO-ACC</th>
<th>NAO-ACP</th>
<th>DAO-ACC</th>
<th>DAO-ACP</th>
<th>IAO-ACC</th>
<th>IAO-ACP</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCF -02</td>
<td>.00</td>
<td>-.31</td>
<td>.09</td>
<td>-.00</td>
<td>.02</td>
<td>-.19</td>
</tr>
<tr>
<td>CCF -01</td>
<td>-.04</td>
<td>-.72*</td>
<td>-.31</td>
<td>.22</td>
<td>-.22</td>
<td>-.53*</td>
</tr>
<tr>
<td>CCF 0</td>
<td>-.28</td>
<td>.02</td>
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<td>.22</td>
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<tr>
<td>CCF +1</td>
<td>-.27</td>
<td>.05</td>
<td>.26</td>
<td>.18</td>
<td>-.00</td>
<td>.17</td>
</tr>
<tr>
<td>CCF +2</td>
<td>-.58*</td>
<td>-.01</td>
<td>.03</td>
<td>.16</td>
<td>-.30</td>
<td>.10</td>
</tr>
</tbody>
</table>

Table 4
Rough scores and T-scores at the first measurement (T0), second measurement (T1) and third measurement (T2) CBCL

<table>
<thead>
<tr>
<th>Variable</th>
<th>T0</th>
<th>T1</th>
<th>T2</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBCL total score</td>
<td>22 51</td>
<td>10 43</td>
<td>2 31</td>
</tr>
<tr>
<td>CBCL Externalising</td>
<td>5 51</td>
<td>0 33</td>
<td>0 33</td>
</tr>
<tr>
<td>CBCL Internalising</td>
<td>8 58</td>
<td>1 41</td>
<td>0 34</td>
</tr>
</tbody>
</table>
Parenting Stress

The score of the sub-scale problem with parenting stress is significantly lower at the post-measurement than at the premeasurement. For the scale of total parenting stress, the score was significantly lower at the post-measurement than at the interim measurement. The other scales showed no significant differences. As can be seen in Table 5, the scores all fell within the normal ranges during each measurement, in other words, there is no sign of clinical problem issues according to the PSCL (Vermulst et al., 2011).

Qualitative measurement

Analysis of the interview showed that mother now felt more connected to her child and that the angry outbursts had diminished. The haptotherapist also reported that the child and the mother both were more in touch with themselves and calmer because of this. Mother also mentioned that she was more aware of her influence on her child’s angry outbursts. Finally, mother also reported that haptotherapy certainly made a contribution, but that the result might not entirely be attributable to HCP.

Discussion and conclusion

In the study at hand, the potential effects and the function of haptotherapy for child and parent (HCP) were studied by means of two sub-studies. This study in question was only the second study into HCP and aimed to gain insight into the effectiveness of HCP and how and why it works.

Sub-study 1. In this sub-study, the potential effects and the way that HCP works were studied in a single-case study of an 11-year-old boy with mild externalising problem behaviour and his parents.

An analysis of the daily measurements showed that, in accordance with the projected hypotheses, the number of angry outbursts per day were significantly lower after the course of treatment than before the therapy. The average intensity and average duration of the angry outbursts were also significantly lower after the course of treatment. These reflect medium effect sizes. Analysis of the change process further shows that the number of angry outbursts during the baseline phase rose, and during the treatment phase declined. During the follow-up phase, the decline leveled out into a constant number (that being zero) angry outbursts per day. The duration of the angry outbursts showed a linear decline between the baseline phase and the follow-up phase. Additionally, the expectation prior to the study based on the literature was that the mother’s acceptance would be higher at the end of the treatment than before (Pollmann et al., 2018). The findings from this study, however, did not conform to the expectations. Mother accepted her son during the entire study as he was, so that the score remained at a constant high.

As was reported by the therapist during the weekly measurements, the score for affective contact for both mother and child showed a linear increase from the beginning through to the end of the treatment period. This is in accordance with the projected hypothesis regarding the affective contact of parent and child. Furthermore, it appeared that a decrease in the number of angry outbursts

<table>
<thead>
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<th>Variable</th>
<th>T0</th>
<th>T1</th>
<th>Interpretation</th>
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<tr>
<td>PSCL total score</td>
<td>40/42</td>
<td>38/39</td>
<td>Normal range</td>
</tr>
<tr>
<td>Problems in parent-child relationship</td>
<td>7/51</td>
<td>6/45</td>
<td>Normal range</td>
</tr>
<tr>
<td>Parenting problems</td>
<td>12/52</td>
<td>10/47</td>
<td>Normal range</td>
</tr>
<tr>
<td>Depressed moods</td>
<td>7/46</td>
<td>7/46</td>
<td>Normal range</td>
</tr>
<tr>
<td>Parental role restricts personal freedom</td>
<td>6/42</td>
<td>6/42</td>
<td>Normal range</td>
</tr>
<tr>
<td>Health issues</td>
<td>8/46</td>
<td>9/51</td>
<td>Normal range</td>
</tr>
</tbody>
</table>
preceded two weeks before an increase in the child’s affective contact. The projected hypothesis, however, was that the change in affective contact would precede a change in angry outbursts. To date, no substantive explanation has been found for the unexpected findings with regard to the relationship between the child’s affective contact and the number of angry outbursts. Earlier research into HCP also showed that the theoretical assumptions regarding the theoretical change model did not correspond with the results (Pollmann et al., 2018). For these reasons, the theoretical change model upon which the hypotheses were formed requires further research. It is recommended that the theoretical change model be further studied through a multiple-case study. The study of multiple cases could possibly establish whether the model should actually be adapted (Stake, 2006). With regards to the mother, the increase in affective contact one week prior to the decrease in the number and intensity of angry outbursts did, indeed, correspond to the hypothesis.

Analysis of the pre, interim and post measurements showed that the scores on the total problem behaviour scale and on the internalising problem behaviour sub-scale are significantly lower during the post measurement than during the premeasurement. The externalising problem behaviour sub-scale did not change significantly. Here also holds true that all scores fell within the normal range. This finding is notable because the original request for help was for the externalising behaviour, namely, the angry outbursts, and yet, the internalising problem behaviour was significantly lower after treatment. This can be explained by the fact that shortly after the therapy had begun, the request for help appeared to be broader than just the angry outbursts. Both mother and the haptotherapist reported that the child was sensitive to stimuli and that this could manifest itself through difficulty in concentrating, psychosomatic symptoms and angry outbursts. This study focused primarily on the angry outbursts, however, these appeared to be a consequence of the underlying problem. The therapy also focused on increasing inner calm and becoming aware of emotion and feelings. Research shows a connection between internalising problems and inner turmoil (Bongers et al., 2003). By focusing on inner calm, the internalising problems, in particular, can be improved. These scores as well, fell within a normal range during each measurement. Therefore, there is no indication of clinical problem behaviour, according to the score on the CBCL (Verhulst & van der Ende, 2013).

Furthermore, analysis of the pre, interim and post measurements showed that the score on the parenting problems sub-scale were significantly lower at the post measurement than at the premeasurement. On the scale for total parenting stress, the score was significantly lower at the post measurement than at the interim measurement. The scores fell within the normal range during every measurement, in other words, there is no indication of clinical problems according to the PSCL (Vermulst et al., 2011). The other scales showed no significant differences. As mentioned before, mother is in better affective contact with herself. Earlier research has shown that when affective contact increases, one is more patient and reacts less aggressively. This responsive and sensitive attitude contributes to the positive development of the child (Ainsworth, 1982; Lopez, 2009). Because of this, the child then exhibits less externalizing behavior, in this case, the angry outbursts (Schrödt et al., 2007; Van de Weijer-Bergsma et al., 2012). This could explain why mother experiences fewer problems with parenting and less parenting stress. The decrease in parenting stress, as with the decrease of the angry outbursts and the increase in affective contact, corresponds with the results from earlier research into HCP (Pollmann et al., 2018).

The outcome of the interviews with mother and the haptotherapist were in line with the findings from the daily, weekly, pre, interim and post measurements. Mother mentioned that she feels more connected to her child and that, as also emerged from the daily measurements, the angry outbursts had decreased. The haptotherapist also reported that both mother and child were more in contact with themselves, and calmer because of this. This corresponds with the score on affective contact, reported by the haptotherapist. Mother also mentioned that she is more aware of her influence on the child’s angry outbursts. As mentioned earlier, analysis of the measurements did show a relationship between the affective contact of the parent and the angry outbursts. Finally, mother reported that haptotherapy certainly made a contribution, but that the result might not entirely be attributed to HCP.

Sub-study 2. During this sub-study, the experiences and effective elements of HCP were studied by means of interviews with four mothers who had followed HCP with their child. It appeared from the interviews that sleeping issues, feelings of insecurity, unexplainable somatic physical problems in children and frequent worry by the child had improved after treatment. According to the respondents, HCP has made a contribution, but it cannot be said whether the therapy could account for the entire result. This concurs with the literature which shows that only a part of the results obtained can be attributed to the
methodology. This is also called the specific effective factors (Lambert & Barley, 2001). It appears that particularly the affective exercises and psychoeducation are experienced as being effective. According to the mothers, the affective exercises proved very suited to children, because the physically-oriented exercises allow the child to physically experience what he or she felt and to become used to this feeling. The psychoeducation resulted in insights gained into the interaction between mother and child and showed what both parties could change in this interaction.

In addition to these specific effective elements, according to the literature there are also extra-therapeutic factors, general effective factors and the placebo effect, which also contribute to the results obtained (Lambert & Barley, 2001). This study has shown that for both parent and child, the relationship with the therapist contributed to the result. The quality of therapist-client relationship falls under general effective factors (Van Yperen et al., 2003). Extra-therapeutic factors and the placebo effect were not mentioned in the interviews as effective factors that contributed to the result.

**Limitations and Recommendations**

This study was carried out during the coronavirus time period. This caused changes in the therapeutic sessions. These sessions were continued using video-calls for the most part, and the affective therapeutic touch work form was decreased and only performed by mother. In addition, the private circumstances of the child following HCP therapy with his parents, changed. For the greater part of the study, the child did not attend school.

These changes could have had an influence on the results, which must be taken into account when interpreting the results. In addition, the SMA programme was used to analyse the child’s angry outbursts and the mother’s acceptance. With this programme, the chance of a type-I error increases if there are more than thirty moments of measurement per phase (Borckardt et al., 2008). The intervention phase consisted of 78 measurements. The results, therefore, must be interpreted with caution. Furthermore, the study design of sub-study 1 is a single-case study. A RCT will have to be conducted in order to prove the actual effectivity of HCP and to be able to generalise to the population (Stams, 2011b). Finally, the number of respondents during sub-study 2 was small (n = 4). All the respondents were highly-educated women.

Therefore, the results cannot be generalised to the population.

In this study there are indications for hypotheses that can be researched in further studies. All in all, the findings of the study at hand confirm that Haptotherapy for Child and Parent appears to be a promising treatment form for children and parents. To gain more insight into this, it is recommended that further research be conducted into the haptotherapy theoretical change model by means of a multiple-case study. Studying multiple cases may possibly indicate whether the change model must indeed be adapted, and whether this has consequences for the practice (Stake, 2006). During a subsequent case study, the daily measurements could be more stringent so as to improve the reliability of the study. One recommendation would be to have both mother and father fill in the daily measurements, where possible. A more reliable outcome could be obtained by comparing the scores. Another possibility might be a self-reporting instrument for the child. It is further advisable to interview the children who participate in HCP about their experiences with HCP, in order to come to a more reliable assessment regarding the experiences and effectivity on children. A larger and more diverse random sampling will also have to be selected with regard to the interviews, in order to arrive at a more generalisable outcome. By acquiring a larger number of respondents, data saturation can be reached, which will ensure a greater reliability for the study (Boeije, 2014).

**References**


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