Effects of Mentalization-based Interventions on Mental Health of Youths in Foster Care

Anna-Karin E. Åkerman, Rolf Holmqvist, Anneli Frostell & Fredrik Falkenström

To cite this article: Anna-Karin E. Åkerman, Rolf Holmqvist, Anneli Frostell & Fredrik Falkenström (2022) Effects of Mentalization-based Interventions on Mental Health of Youths in Foster Care, Child Care in Practice, 28:4, 536-549, DOI: 10.1080/13575279.2020.1812531

To link to this article: https://doi.org/10.1080/13575279.2020.1812531

© 2020 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

Published online: 25 Sep 2020.

Article views: 1514

View related articles

View Crossmark data

Citing articles: 1

Full Terms & Conditions of access and use can be found at https://www.tandfonline.com/action/journalInformation?journalCode=cccp20
Effects of Mentalization-based Interventions on Mental Health of Youths in Foster Care

Anna-Karin E. Åkerman, Rolf Holmqvist, Anneli Frostell and Fredrik Falkenström

Department of Behavioral Science and Learning, Linköping University, Linköping, Sweden

ABSTRACT

Knowledge about the development of mental health in young people in foster care is limited. This naturalistic study examined the effects of a relational and mentalization-focused treatment in foster families in Sweden on the placed young people’s mental health. The Achenbach System of Empirically Based Assessment (ASEBA) was used to measure change in psychiatric symptoms. Self-ratings showed significant improvements and medium to strong effects after 24 months in both boys and girls. No significant changes were found in the foster parents’ ratings or in the school staff’s ratings. Foster parents’ ratings suggested that girls’ behavioral problems decreased, but not the boys’. Based on these findings, we want to emphasize the importance of evaluating treatment effects using self-ratings by the young people in addition to parents’ and parent substitutes’ ratings.

KEYWORDS

Foster care; treatment model; mentalizing; attachment; ASEBA; outcome

Introduction

Placement in foster care by social services is a common arrangement in Sweden, as well as in other countries, when children and adolescents have been maltreated by parents or when they behaved in antisocial ways that the parents could not prevent. During the twentieth century, it has been the legislator’s intent that children and adolescents who cannot stay with their parents should be placed in foster families instead of in institutions (Höjer, 2014). The number of children and young people in foster care in Sweden has increased successively. According to official Swedish statistics, 30,510 young people were subject to 24-hour placements at some time during 2016 (Socialstyrelsen, 2017; young people in the asylum process are not included in these statistics). The most common form of placement was foster care. In many countries, authorities traditionally transform foster care into adoption of the child when foster care is expected to become permanent. In Sweden, such adoptions are not used which means that it is possible for the child to remain in foster care throughout their adolescence. From an attachment perspective, this can be seen as problematic, since children who have lived for a long time in foster care and are attached to their foster family can be returned to their biological parents. In addition,
knowledge that foster care is not permanent may interfere with attachment formation to
the foster parents. For many children in foster care, this implies an upbringing with low
degree of predictability and a built-in insecurity.

In attachment theory, a key concept is the capacity of the infant to use the attachment
figure as a safe haven who can be returned to or called for and trusted in times of stress
(Ainsworth, Blehar, Waters, & Wall, 1978), and a secure base (Bowlby, 1988) from which
to explore the world. Foster families need to provide secure family contexts for children in
care. Schofield and Beek (2006) suggested that a secure base in a foster family includes
being available, responding sensitively, accepting the child, caregiving co-operatively and
promoting family membership. Early experiences of neglectful and abusive parenting
may cause children to distrust close relationships. Children who are placed in foster
care may have a sense of loss and dislocation which can make them cautious, and for
many of them experiences of maltreatment will have long-lasting and profound effects
(Schofield & Beek, 2006). These children and young people may have negative expecta-
tions of their foster parents. This makes it difficult for the young person to let foster
parents come close enough to establish new and supportive relationships. Thus, the
foster parents are in a challenging and complex situation.

Parents’ as well as foster parents’ caring capability is related to the parent’s own attach-
ment pattern (Feeney & Woodhouse, 2016). Based on meta-analytic findings, adult attach-
ment representations have been shown to be robust predictors of caregiving quality
(Ijzendoorn van, 1995). The attachment system is also a crucial foundation for the develop-
ment of the human ability to reflect on mental states known as mentalizing. Mentalizing is
defined as an implicit and explicit understanding of human behavior as based on mental
states like thoughts, emotions and intentions (Allen, Fonagy, & Bateman, 2008; Bateman
& Fonagy, 2016). Fonagy and his colleagues argue that the capacity to mentalize develops
in the interaction between the caregiver and the child, usually within a secure attachment
relationship. Parental caregiving is linked to mentalizing; i.e. the parents’ ability to reflect
on their own mental states and their child’s mental states (Ensink, Normandia, Plamondon,
Berthelot, & Fonagy, 2016; Feeney & Woodhouse, 2016). Mentalizing, operationalized as
reflective functioning, is one important component of the caregiving system (Ensink et al.,
2016; Feeney & Woodhouse, 2016; Onions, 2018). Improvements in reflective function-
ing has been linked to improvements in caregiving quality (Suchman, DeCoste, Leigh,
& Borelli, 2010). To support and develop parental mentalizing is thus important for retain-
ing high-quality foster parenting as well as helping foster parents to manage the intense
emotional impact of caring for traumatized children (Midgley et al., 2017; Onions, 2018;
Redfern et al., 2018). Clinical experience suggests that even foster parents with relatively
stable mentalizing ability can find that their capacity to reflect is impaired in their caregiv-
ing interaction with a disorganized foster child. Support and supervision for foster families is
probably key to preventing placement breakdown (Rooij van, Maskaant, Weijers, Weijers,
& Hermanns, 2015). Shea (2015) has suggested that systematic work with establishing a
holding professional team around each young person in placement is important, considering
the many and complex relations surrounding a young person in foster care.

Swedish registry data have shown that children in long-term foster care are at sig-
nificantly higher risk of developing various social or psychiatric problems as young
adults (Vinnerljung, 2006; Vinnerljung, Berlin, & Hjern, 2010). Individuals with a
history of long-term foster care have been shown to have a risk of suicide attempts,
drug use and criminality several times higher than young people who have not received interventions from the social services. Other studies have shown that psychological development is poorer in children who grow up in foster families compared to children who grow up with their biological parents (Burns et al., 2004; Laurel et al., 2010; Leslie, Hurlburt, Landsverk, Barth, & Slymen, 2004; Miller, Fan, Grotevant, & van Dulmen, 2000). These deficiencies become manifest in behavioral and emotional problems as well as in relational difficulties. The prevalence of emotional and behavioral disorders among young people in foster care have been shown to be extensive (Egelund & Lausten, 2009; Heflinger, Simpkins, & Combs-Orme, 2000; Lehmann, Havik, Havik, & Heiervang, 2013; Pecora, White, Jackson, & Wiggins, 2009). These studies were conducted in Canada, Denmark, Norway and the USA. There are no comparable Swedish studies.

The current study focuses on treatment in what is sometimes called therapeutic or specialized foster care. Therapeutic/specialized foster care refers to placement in foster care settings with treatment interventions and support aimed at the child or young person in placement or the foster parents or both. The treatment model in this study, Treatment By Foster care (TBF), focuses on enhancing mentalizing in foster parents as well as in the young people receiving treatment. It also aims at providing a secure family context as described by Schofield and Beek (2006).

**Purpose**

The primary purpose of this naturalistic study was to analyze effects of treatment in a relational and mentalizing-focused treatment model for youths in foster care. The main research question was: Do emotional and behavioral problems decrease during treatment according to the young people themselves, their foster parents and school staff? A second purpose of the study was to assess whether there were any differences in effects of interventions in relation to gender or age.

**Method**

**The treatment model**

The study is based on data from young people in specialized foster care according to the TBF treatment model. The TBF model is mentalization-based and relationally focused. The treatment was provided by a private company which has developed the TBF model. Theoretically, the model is based on relational psychodynamic theory, especially on attachment and mentalization theory. Interventions are focused on helping the children to develop their capability to interact; to develop mentalization abilities and hence be able to have meaningful relationships. Interventions are aimed both at the foster parents and the young people in placement. All young people in treatment have contact with a psychologist for assessment and most of them also enter psychotherapy post assessment. For the children, the therapy is play therapy once a week, often for several years. The majority of the young people enter individual psychotherapy but in some cases the therapy is arranged in a family or group setting. The family sessions could be arranged biweekly or once a month, while the group therapies are biweekly. The group therapy is mentalization-
based. The young people’s psychotherapies tend to vary more in length and arrangement than the children’s psychotherapies.

By providing directed and enhanced support to the treatment families, the treatment model strives to build a sufficiently secure and holding environment. Around each child or youth in care, there is a team consisting of a treatment manager, a psychologist and the foster parents. The foster parents are receiving continuous supervision (Allen et al., 2008; Bateman & Fonagy, 2016; Redfern & Cooper, 2016; Redfern et al., 2018), and 24-hour support. In general, the supervision is provided in both an individual setting for each foster family or parent biweekly and in mentalization-focused groups with other foster families once a month. Individual adjustments are made to the model. This may include more intensive guidance if needed.

One of the foster parents, the mother or the father, has a full-time employment at TBF. Both parents are offered support and supervision, but most commonly the parent that has the employment is the one that is continuously participating in supervision and training.

All professionals in the TBF-model receive training in mentalization-based treatment (MBT; Allen et al., 2008; Bateman et al., 2016). The foster parents’ training is mainly theoretical but includes group-discussions to encourage self-reflection. In addition, all professionals in the team, including the foster parents, are trained in the International Child Development Programme (ICDP; Bergman & Edenhammar, 2006; Hundeide, 2001). ICDP is a program that aims to enhance the caregiver’s capability for self-reflection in order to enhance the responsiveness and sensitivity in interaction with the child. The program is based on attachment theory, developmental psychology and the UN Convention on the Rights of the Child. In conformity with mentalization-based practice, ICDP assumes that the interaction and the relationship between the carer and the child are of great importance to the child’s development. The ICDP-training is theoretical but also practical, and runs over two to four semesters, once a month.

**Participants**

The current study included all children and youths in TBF-care between 2008 and 2016 ($n = 105$). All participants were living with foster families in rural areas in the south-east of Sweden. This group of children and young people had childhoods which, before the current placement, were characterized by neglect and maltreatment. Common problems in their biological families included severe dysfunctional family relations, parents with severe mental health problems, physical or sexual abuse or drug abusing parents. In addition, many of the participants have experienced repeated placement changes, including several disruptions and separations from attachment persons and from the young people’s living environments. These frequent shifts had taken place for various reasons such as difficulties relating to other people that previous foster families could not cope with, ongoing conflicts with the biological network leading to placement breakdowns or disruption caused by shortcomings in social services’ handling of their case.

To sum up, the participating young people can be described as vulnerable, with serious and complex problems. Data is not available for each individual concerning the degree and type of maltreatment or concerning changes in caregivers or breakdowns in earlier placements. However, a review of all children receiving treatment in the current model during the autumn of 2017 ($n = 58$) showed that 90% had at least one placement in foster care.
prior to the current placement, 33% had experienced institutional care and 38% had three or more earlier placements.

At baseline, the young participants were between 5 and 18 years of age and the mean age was 13.27 years (median 14 years, SD = 3.08 years). Gender distribution was almost equal with 49% girls ($n = 51$) and 51% boys ($n = 54$), a total of 105 individuals ($n = 105$) that participated in this study. Due to internal missing data, the number of participants in each analysis varies.

**Measures**

The *Achenbach System of Empirically Based Assessment* (ASEBA; Achenbach & Rescorla, 2001) is one of the most widely used child and adolescent assessment measures. ASEBA is a standardized instrument that consists of three parallel questionnaires for assessing emotional and behavioral problems: the Child Behavior Checklist (CBCL) that is used for parents’ or surrogate parents’ ratings, the Teacher’s Report Form (TRF) that is used for teachers’ ratings and the Youth Self-Report (YSR) is used for adolescents’ self-ratings, aged 11–18 years.

ASEBA consists of a competence scale and a problem scale. In the current study, only the problem scale was used. The ASEBA problem scale contains 112 questions divided into eight subscales and two broad-band dimensions: Internalizing and Externalizing problems. The broad-band dimensions and the Total problems score were used. The Internalizing dimension consists of the sum of the following sub-scales: Withdrawn, Somatic Complaints and Anxious/Depressed. The Externalizing dimension is the sum of Delinquent Behavior and Aggressive Behavior. Total problems are calculated as the sum of the two broad-band dimensions plus the problem subscales Social Problems, Thought Problems and Attention Problems. The rater is asked to rate each item on a three-point scale: 0 = not true, 1 = somewhat true, and 2 = very true or often true.

A number of studies have shown that ASEBA is an instrument with good validity and reliability (Achenbach & Rescorla, 2001). Previous studies have shown that parents rate more problems than teachers, and that correlations between informants (parents and teachers) are modest ($r = .27$ for Total problems, $r = .33$ for Externalizing and $r = .24$ for Internalizing problems; Rescorla et al., 2014). Adolescents’ ratings tend to yield higher problem scores than parents’ ratings, which applies to all types of problems in normal populations (Rescorla et al., 2013). Cross-informant agreement between parents and adolescents has not been shown to be better for Externalizing problems than for Internalizing. Other studies have found poor agreement between children’s and parents’ ratings of internalizing symptoms, but stronger agreement in ratings of externalizing symptoms (Achenbach, McConaughy, & Howell, 1987; Ladakakos, 2000).

Tarren-Sweeney, Hazell, and Carr (2004) found that foster parents are as reliable informants as biological parents considering children’s emotional and behavior problems, at least in cases with long-term placements (Tarren-Sweeney et al., 2004). Handwerk, Larzelere, Soper, and Friman (1999) showed that foster parents could be more reliable raters of behavior problems than birth parents.

**Procedure**

Data was collected as part of the treatment routine between 2008 and 2016. All young people, their foster parents and their teachers rated the ASEBA (CBCL, YSR, TRF).
every six months. Self-ratings (YSR) were only performed by subjects from 11 years of age. The baseline rating was carried out 3–6 months after placement. The reason for the delayed baseline rating is that the foster parents and the teachers must know the child to be able to carry out reliable ratings. Furthermore, it reduces the risk of capturing the acute and immediate reactions to the change and separation due to the move itself.

At baseline, the total number of participants was 105. Due to internal data attrition, the number of cases with complete data diminished over time. The majority of the participants have left foster care in TBF due to positive development and moved back to their biological family when possible, but more often moved to their own accommodation with various forms of support. We do not have accurate, reliable data regarding this. In some cases, attrition is due to missing data because of treatment routines not being followed. Analyses of missing data revealed no significant differences concerning symptoms (i.e. CBCL, TRF, and YSR) at baseline between cases with data compared to cases without data at 18 months, as well as at 24 months in care. There are no obvious systematic patterns in missing data.

**Data analysis**

The changes in ASEBA scores between baseline and 12 months in care, baseline and 18 months in care and baseline and 24 months in care were analyzed using two-tailed paired sample *t*-tests on raw scores and on T-scores. The analyses were carried out for the whole group and for a younger (≤10 years of age) and an older group (≥11 years of age) separately. Effect sizes were calculated as Cohen’s *d*. Comparisons between girls and boys were calculated with gain scores, i.e. the difference between the first and the last rating. In order to analyze potential interactions between change over time and gender, analyses with repeated measures ANOVA using gender as covariate were carried out. Correlations between Internalizing and Externalizing symptoms were calculated with Pearson’s *r* (2-tailed) in the three different questionnaires (CBCL, TRF and YSR). Also, correlations between the three different ratings in CBCL, TRF and YSR were calculated.

Percentile ranks were converted into dichotomous variables according to guidelines provided by Achenbach and Rescola (2001) in order to differentiate scores in the clinical range. The borderline cut-point between clinical and non-clinical range in ASEBA is the 82nd/83rd percentile for the broadband and total scales (T-score cut-point: 59/60). Cut-off points are two standard deviations above the mean. In order to compare the number of subjects with problems in the clinical range, borderline clinical range and subclinical range at baseline and changes during treatment, Pearson’s chi-square test was used.

For the statistical analyses SPSS version 23 was used (IBM Corp, 2015). Ethical approval for this study was obtained from the Central Ethical Review Board in Sweden 2016-10-31 (Dnr Ö23-2016).

**Results**

**Changes in ASEBA scores**

For the first 12 months of treatment no significant changes were found (data not shown) on any of the rating scales. Neither foster parent (CBCL) nor teacher rated (TRF)
problems changed significantly over the first 18 months (Table 1) or 24 months (Table 2) of treatment. However, according to the young people’s own ratings (YSR), their severity of Internalizing and Externalizing problems as well as Total problems decreased significantly over the first 18 months (Table 1) and 24 months (Table 2). The improvement was significant in analyses of raw scores as well as T-scores.

The effect was strongest concerning Internalizing problems, with a medium effect after 18 months ($d = .62$) and a strong effect after 24 months in treatment ($d = .82$) based on raw score improvements. The improvement was smaller concerning Externalizing problems, but it increased from a small effect after 18 months ($d = .32$) to a medium effect ($d = .58$) after 24 months in treatment. The effect on Total problems increased from a small effect ($d = .45$) at 18 months to a medium effect ($d = .72$) after 24 months in treatment.

The mean levels of the T-scores were above the cutoff-level between the borderline-clinical range and the non-clinical range in the foster parents’ and teachers’ ratings. In the self-ratings (YSR), the mean T-score was close to but below the cutoff-level (i.e. in the non-clinical range) at baseline. At 18 months and at 24 months, the mean T-score was in the subclinical and normal range. An analysis of the number of subjects with problems in the clinical range and border-clinical range in YSR (merged due to the low number of subjects) versus in the non-clinical range showed close to significant improvement after 18 months in treatment ($chi^2 = 3.635, n = 27, df = 1, p = .057$).

**Interaction between time and gender**

In order to analyze potential interactions between change over time and gender, analyses with repeated-measures ANOVA using gender as covariate were made. For CBCL, significant interaction effects were found for Externalizing problems and close to significant effects for Total problems, but not for Internalizing problems. For the Total problems

| Table 1. Means (M) and standard deviations (SD) of raw scores and T-scores of the ASEBA-scorings at baseline and after 18 months in treatment and analyses of the differences between them with paired samples t-tests. |
|---|---|---|---|---|---|
|   | CBCL |   | TRF |   | YSR |
|   | Internalizing | Externalizing | Total problems | Internalizing | Externalizing | Total problems |
|   | M (SD) | M (SD) | M (SD) | M (SD) | M (SD) | M (SD) |
| Baseline | 13.59 (9.71) | 16.59 (10.65) | 55.70 (31.32) | 9.25 (6.29) | 14.69 (12.33) | 46.03 (31.73) |
| 18 months | 13.39 (10.23) | 15.80 (10.10) | 51.48 (29.07) | 8.03 (7.31) | 12.47 (11.19) | 40.13 (30.85) |
| t-values | 0.147 | 0.502 | 0.999 | 1.129 | 1.049 | 1.111 |
| p | .884 | .619 | .324 | .267 | .302 | .275 |
| d | .479 | .609 | .212 | .107 | .349 | .291 |
| Raw scores | Raw scores | Raw scores |
| Raw scores | Raw scores | Raw scores |
| Raw scores | Raw scores | Raw scores |

Note: CBCL = Child Behavior Checklist, TRF = the Teacher’s Report Form, YSR = Youth Self-Report.

*p < .05. **p < .01. ***p < .001.
scale, a linear trend for time was found (F(1,20) = 3.66, p = .070), and a trend for interaction between time and gender (F(1,20) = 4.16, p = .055). The interaction should be interpreted as average symptom severity decreasing for girls (n = 8) but not for boys (n = 14).

For Externalizing problems, a linear trend for time was found (F(1,20) = 3.56, p = .074) and a significant effect for the interaction (F(1,20) = 7.62, p = .012). Again, externalizing symptoms decreased for girls but not for boys (Figure 1).

For the Total problems in the YSR scale, a significant effect was found (F(1,12) = 10.58, p = .007). A significant time effect was also found for Internalizing problems (F(1,12) = 16.66, p = .002) and for Externalizing problems (F(1,12) = 7.11, p = .021). No interaction effects were found on YSR. A comparison of gain scores for boys and girls showed that girls decreased in TRF Total problems significantly more than boys at 18 months (t = 5.46, p = .03). At 24 months, girls’ decreased in CBCL Externalizing problems significantly more than boys (t = 7.83, p = .01). CBCL Total problems showed close to significant difference at 24 months (t = 4.0, p = .06).

### Age effects

Analyses of changes were carried out separately for the two age groups (5–10 years and 11–18 years). Analyses showed no significant changes in CBCL scores in the younger group (n = 14 at T3; t = .81, n = 10 at T4; t = .84), and not in the older group either (n = 30 at T3; t = .69, n = 14; t = 1.09 at T4).

### Internal correlations and correlations between raters

The correlations between Internalizing and Externalizing symptoms within questionnaires were calculated for the three questionnaires at baseline. All correlations were moderate or strong (r = .46-.61, p = .000). The correlations between the three questionnaires correlated...
significantly in several ways: CBCL Internalizing scores correlated strongly with YSR Internalizing scores \( (r = .52; p = .000) \) and moderately with YSR Externalizing scores \( (r = .35; p = .002) \). CBCL Externalizing scores correlated strongly with YSR Externalizing scores \( (r = .58; p = .000) \). There were moderate correlations between TRF Externalizing symptoms and CBCL Externalizing symptoms \( (r = .31, p = .006) \), and with YSR Externalizing symptoms \( (r = .33, p = .013) \). The remaining dimensions did not correlate significantly. TRF ratings showed fewer significant correlations than CBCL and YSR. Overall, the ratings correlated as expected.

**Discussion**

In this study, effects on mental health problems of a mentalization-based and relationally focused treatment model, TBF, for young people in foster care, were analyzed. The main findings were that mental health improved substantially from the young people’s perspective but not from the foster parents’ perspective.

From the young people’s perspective mental health improved, and the gain was significant at 18 months in treatment, and even more evident at 24 months in treatment. In some studies, only the foster parents’ ratings (CBCL) have been analyzed instead of using all three questionnaires in ASEBA to evaluate the effects of placement (e.g. Aarons et al., 2010; Luke, Sinclair, Woolgar, & Sebba, 2014; Tarren-Sweeney et al., 2004). It seems important to also get the ratings from the young people themselves. CBCL is recommended as an instrument to determine foster children’s clinical problems, but not YSR (the self-ratings) (Luke et al., 2014; Rosanbalm et al., 2016). We think the young person’s own ratings of their well-being should be given great importance. Especially considering emotional problems, there is an evident problem in relying solely on raters other than the subject himself or herself as these may not be readily perceptible to external subjects.

Problems did not decrease when assessed from foster parents’ or teachers’ perspectives. The fact that different informants have different perspectives and have limited agreement in their ratings of the young persons’ mental health is in line with findings from other
studies (Achenbach et al., 1987; Handwerk et al., 1999; Ladakakos, 2000). One explanation of why foster parents do not rate decreased problems could be relational. When the adults surrounding the young person get to know him or her better and relations start to be built, the problems and suffering of the young person will be more visible. While foster parents may hope that their care will be received by a vulnerable child or young person, their concerns are often rejected because of the young person’s negative attachment experiences. The natural slowness of change of attachment-based internal working models are well described in attachment research as well as in social cognitive research (e.g. Cassidy, 2000; Crick & Dodge, 1994; Dozier & Rutter, 2016; Hart, 2009). Internal working models control cognitive and affective processes such as perception, anticipations and interpretation of behavior of others. Early established relationship patterns based on previous attachment experiences may cause negative expectations and interpretations from the young people of foster parents’ and teachers’ behaviors. From an attachment perspective, one can also assume that when the young person becomes more secure in the foster family, he or she dares to be more in touch with, and open with, his or her emotions. As a consequence, the young person may show more emotional distress and more problem behaviors.

The young person’s rejection and mistrust may impair the parent’s mentalizing capability, leading to vicious circles in which the parent, in turn, misrepresents the child’s mental states leading to further relational problems (Ensink et al., 2016; Onions, 2018; Redfern et al., 2018). In addition, if the foster parent’s capacity to reflect on the young person’s mental states is impaired, the parent may not notice changes in mental health of the young person, being preoccupied by regulating their own troubled affects.

These relational phenomena may explain why foster parents and school staff do not rate improved mental health after this fairly short time, 18–24 months, but the young people do. Self-ratings show that emotional problems improve the most. Through the foster parents’ struggling to get emotional contact with the rejecting young person, the young person may experience some relief in suffering even though not communicating this in a comprehensible way.

Another possible explanation for the absence of problem decrease according to foster parents and teachers may be that the TBF model is not effective enough when it comes to the interventions directed to the foster parents or even to these children and adolescents.

The self-rated mental health was about the same level in this study as in the Multidimensional Foster Care in Swedish antisocial youths by Hansson and Olsson (2012). However, the parents’ ratings in this study were lower (i.e. rating a lower degree of problems), about 10 raw points on Total problems, compared to Hansson and Olsson (2012). One explanation is that the parents’ ratings in this study were carried out by foster parents and not by biological parents. Biological parents have a longer and qualitatively different relationship to young people than a foster parent, which affects the ratings, especially at baseline. The difference may also have been influenced by the foster parents’ expectations; they may expect the young people to present various problems which could increase the foster parents’ tolerance in the beginning. At the same time, biological parents may have reason to accentuate problems, in order to be sure to get help.

We found that some results indicated that girls improved more than boys. According to the foster parents, behavioral problems decreased for the girls but not for the boys. One explanation could be that the girls’ behavioral problems were met with less tolerance than the boys’
problems, implying that foster parents put higher demands on girls. This could lead to faster adaptation for the girls than for the boys. A possible consequence of this adaptation could have been girls experiencing increased emotional problems, but there was no such indication. This may imply that foster parents and school staff are more lenient in their assessment of boys’ behavior problems. A consequence may be that boys do not get the help and emotional contact that they need. Aarons et al. (2010) found that placement change after 18–36 months predicted subsequent emotional and behavioral problems for girls but not for boys. This implies that there could be gender-specific vulnerabilities as well as possibilities.

The most evident limitation in this study was the lack of a control group. All young people receiving mentalization-based and relationally focused foster care in this organization were included and no sampling procedure was performed. In this kind of naturalistic study, it is hard to randomize to different kinds of foster care. On the other hand, it was a strength that all individuals in treatment were included.

The high data attrition is also a limitation. We lack full information concerning reasons for this attrition. Most of the attrition was caused by termination of the placement. We lack exact data on the reasons for terminations, however, the high attrition was not primarily due to placement breakdown. Another limitation is the low number of participants and that all participants were placed and got treatment within the same organization, which decreases generalizability. The baseline rating was carried out a couple of months after placement. This can be seen as a weakness as well as a strength of this study. As Handwerk et al. (1999) pointed out, a delayed baseline rating may decrease the risk that the young people are “faking good” in their ratings to get out of placement. Delayed ratings also avoid capturing effects of the acute crisis that may follow the placement itself and allow foster parents as well as teachers to get to know the young person before rating. No measures were used to determine whether the ICDP and the mentalizing interventions performed with fidelity. However, the level of education was generally high among the staff who provided supervision and support to the foster families. This probably affected the quality and stringency of mentalizing interventions in a positive direction. The study did not include any ratings made by therapists or case managers. This could be seen as a limitation, even if the purpose of the study was to analyze effects of treatment from the perspectives of the young people themselves and the adults surrounding them in everyday life.

This study shows that future studies need to use qualitative methods to gain a deeper understanding of the reasons why the young people rate improved mental health but the foster parents do not. Also, future studies should analyze other aspects of the psychological development of the young people receiving mentalization-based and relationally focused foster care, e.g. self-image change and change in adaptive capability in everyday life in order to understand the relationships between treatment model and potential outcome better. Evaluation of the effects of the treatment for longer than 24 months would be of great value.

**Disclosure statement**

Author Anna-Karin Åkerman was employed as a psychologist at the company where data was collected for the study. Åkerman does not have any other economic interests to declare. Authors Fredrik Falkenström, Anneli Frostell and Rolf Holmqvist have no declarations of interest. This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.
Notes on contributors

Anna-Karin E. Åkerman is a Doctoral Student at Department of Behavioral Science and Learning, Linköping University, Linköping, Sweden. Anna-Karin has been working as a psychologist for 25 years and most of the time with children, adolescents and parents within the social services. She also has a private practice for relational and interpersonal psychotherapy and supervision. Email: anna-karin.akerman@liu.se

Rolf Holmqvist is a Professor Emeritus in Clinical Psychology at Department of Behavioral Science and Learning, Linköping University, Linköping, Sweden. He has been full time professor at this university since 2008 and made research on different aspects of psychological treatments. He has also lectured on psychodynamic and relational psychotherapy. In addition to his research, he has a private practice for psychotherapy and supervision. Email: rolf.holmqvist@liu.se

Anneli Frostell is an Associate Professor in Psychology at Department of Behavioral Science and Learning, Linköping University, Linköping, Sweden since 2009. She has made research on psychological stress in children and how serious life events increases the risk for childhood type 1 diabetes. Her main research interest is attachment research. Email: anneli.frostell@liu.se

Fredrik Falkenström is Associate Professor at the Department of Behavioral Sciences and Learning, Linköping University, Sweden. His research focuses on the processes of change in psychotherapy, and the methodologies for evaluating these. Email: fredrik.falkenstrom@liu.se

ORCID

Rolf Holmqvist http://orcid.org/0000-0003-2093-2510
Fredrik Falkenström https://orcid.org/0000-0002-2486-6859

References


