Who Cares?! Baseline profiles and child development in different 24-h settings

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6 General Discussion

INTRODUCTION

The costs of youth care services recently soared to unsustainable levels, resulting in urgent calls for reform of the system (e.g., Bosscher, 2014; Fegert & Stötzel, 2016; Klag et al., 2016; Menozzi, 2016; World Health Organization, 2014). The reform called for should place greater emphasis on preventive and in-home (support) services, attempt to reduce the use of (specialized) out-of-home care services, and simultaneously improve the quality of the remaining specialized 24-h care services (Bosscher, 2014; Courtney, 2000; Hilverdink, Daamen, & Vink, 2015). To enhance the quality of specialized 24-h care services, knowledge concerning the baseline child and family characteristics of out-of-home placed children, and the link(s) between these baseline factors and children's development in the various 24-h settings is required (Anderson, Lyons, Giles, Price, & Estle, 2003; Barth, 2002; Conn, Szilagyi, Jee, Blumkin, & Szilagyi, 2015; Courtney, 2000; Frensch & Cameron, 2002; Klag et al., 2016; McCrae, Lee, Barth, & Rauktis, 2010; Strijker, Zandberg, & Van der Meulen, 2002). When the identified baseline factors are linked to favorable and unfavorable psychosocial development of these out-of-home placed children, the findings obtained have the potential to supply building blocks for the development of sound decision-making strategies for referral to a certain type of out-of-home care. In addition, the findings provide insight into which child and family factors need additional treatment during placement. Together, this increases the likelihood that children for whom (temporary) out-of-home placement is inevitable will receive the most effective service with regard to their developmental needs.

The primary objective of this thesis was to extend knowledge of this topic by (1) identifying the typical child and family characteristics for each of the three main types of out-of-home care at the time of admission and (2) linking these baseline factors to favorable and unfavorable psychosocial development of children during the first year of placement. This was done with the aim of supplying evidence-based building blocks for the development of a decision-making tool intended to support referral to the most appropriate and effective out-of-home care services given the baseline circumstances. To this end, first, child and family characteristics at the time of admission to foster care, family-style group care, and residential care were investigated by means of a scoping review (see Chapter 2) and a cross-sectional empirical study of a sample of 200 Dutch primary school-aged children (see Chapter 3). The findings revealed considerable differences in baseline factors between the children in the three settings examined. This suggested that the three types of care individually serve a specific target group. Second, the psychosocial development of children placed out-of-home was investigated through a follow-up cohort study (see Chapter 4). The findings of this study suggested that the percentage of children who developed favorably in the three examined settings was broadly equal, despite considerable differences in their baseline child and family characteristics. Finally, the link(s) between the baseline factors on the one hand and (un)favorable child psychosocial development on the other was studied by means of discriminant analyses (see Chapter 5). The findings indicated that certain sets of baseline factors are indeed related to children's psychosocial development in the three types of out-of-home care and can thus be nominated as building blocks for the development of sound decision-making strategies. Both favorably and unfavorably developing children had different

sets of baseline factors at the time of admission, both in and across the three types of care. This was particularly evident for unfavorably developing children.

In this final chapter, we reflect on the main findings of this thesis and discuss their implications for clinical practice; in this discussion, the adapted version of Kerig, Ludlow, and Wenar's model (2012) again serves as a framework. In this transactional developmental model a child's development is perceived as being a product of the dynamic interactions that that child with his or her developmental contexts (e.g., individual, family, and care context) during the series of successive developmental processes children undergo (see Figure 1 in the introduction). The building blocks for the development of decision-making strategies, which are based on the baseline factors which both univariately and multivariately distinguished between favorably or unfavorably developing children in the three 24-h settings investigated (see Chapter 5), are presented first. Subsequently, the practical implications for the current overall care context are discussed. Thereafter, the strengths and limitations of the study are discussed, and directions for future research are proposed. The chapter ends with an overall conclusion.

BUILDING BLOCKS FOR DECISION-MAKING STRATEGIES

Building blocks identified in the individual (child) context

Within the individual context, five baseline factors were identified to be both univariately and multivariately significantly related to favorable or unfavorable psychosocial development and are therefore designated as building blocks. These factors were quality of attachment, level of psychosocial functioning, presence of child mental illness, age of admission, and gender.

Quality of attachment

First, the quality of attachment at the time of admission is an important building block, as it is related to a child's level of psychosocial development. In addition, attachment is an important topic because the associated attachment theory is at the heart of the question of whether residential care should be part of the continuum of out-of-home care. Moreover, it is also central to the question of whether an out-of-home placement should be used at all (Bowlby, 1952; Bruskas, 2008; Schneider & Phares, 2005; Textor, 1993).

According to the literature, attachment-related problems are the least common in foster children. Lee (2010), for example, states that children with such problems are approximately 75% less likely to be placed in a family-based setting. This was partly confirmed in our empirical study, as case file records indicated that only15% of the foster children has been diagnosed with reactive attachment disorder (RAD) (see Chapter 3). Nevertheless, additional analyses showed (sub)clinical levels of social-emotional detachment in 51% (n = 45) of the foster children at the time of admission, as reported on the social-emotional detachment questionnaire (SEDQ) (Leloux-Opmeer, Kuiper, & Scholte, 2015); multivariate analysis showed that these (sub)clinical levels were related to unfavorable psychosocial development in foster children.

The high number of children with attachment problems found in family-style group care (which is also a family-based setting) was also inconsistent with the aforementioned claim of

Lee (2010). Case file information indicated that at least one in three children has been diagnosed with RAD. In addition, the clinical level of attachment problems as reported on the SEDQ was significantly higher than the level of problems reported for residentially placed children (see Chapter 3). These findings most likely reflect the "last resort" position that family-style group care currently occupies in the Dutch continuum of care; the high number of previous placements prior to placement in this type of care also suggests this (see Chapter 3). Additional analyses showed a mean of 5.4 (SD = 2.3, *n* = 29) years of youth care services usage prior to the current placement (Leloux-Opmeer et al., 2015). The level of baseline social-emotional detachment was found to be both univariately and multivariately related to unfavorable child development in family-style group care in particular.

Finally, the mean baseline level of clinical detachment problems (based on the SEDQ) found in residential care was unexpectedly found to be significantly lower than in family-style group care (see Chapter 3). Nevertheless, one in three residentially placed children was diagnosed with RAD according to case file records. This finding emphasizes the urgency to screen and treat attachment problems in residentially placed children right from the start in order to re-enable detached children to develop new, healthier relationships. This will probably also increase the odds for successful relocation to family-based settings (Bowlby, 1952; Textor, 1993), thus supporting the aim of decreasing the long-term usage of institutional care. Furthermore, with regard to residential care, the findings of additional analyses also demonstrated the importance of identifying children without attachment problems as well, as these children are particularly at risk of developing unfavorable attachments in this setting (Leloux-Opmeer, Kuiper, & Scholte, 2016). It is possible that these well-attached children would have benefited more from a family-based setting.

Altogether, it is strongly recommended to systematically screen for attachment-related problems at the time of admission to 24-h care services and to treat identified problems right from the start, as doing so would increase the likelihood of positive placement outcome.

Level of children's psychosocial functioning

A second building block for the development of a sound decision-making strategy for referral to a certain type of out-of-home care is the baseline level of a child's psychosocial functioning. A high level of psychosocial problems negatively affects placement outcomes (e.g., Becker, Jordan, & Larsen, 2007; Den Dunnen et al., 2012; Jones et al., 2011; Raviv, Taussig, Culhane, & Garrido, 2010), increases the likelihood of placement breakdowns, particularly in foster care (e.g., Aarons et al., 2010; Oosterman, Schuengel, Slot, Bullens, & Doreleijers, 2007; Vanschoonlandt, Vanderfaeillie, Van Holen, & De Maeyer, 2012), and, in our empirical study, was found to be univariately and multivariately related to unfavorable psychosocial development.

Although the number of favorably developing children during the first year of placement was broadly equal across the three settings (when controlled for baseline functioning), the average level of psychosocial problems in foster children slightly increased (at a trend level), similarly to findings in the literature (Lawrence, Carlson, & Egeland, 2006; Vanderfaeillie, Van Holen, Vanschoonlandt, Robberechts, & Stroobants, 2013). Since this deterioration in psychosocial functioning specifically concerned foster children without clinical psychosocial problems at the time of admission, it may reflect an effect associated with disrupted

attachment to biological parents (Racusin, Maerlender, Sengupta, Isquith, & Straus, 2005). However, not all of the literature sources related to this topic are in accordance with these findings. The meta-analysis conducted by Goemans, van Geel, and Vedder (2015), for example, showed no significant change in the psychosocial functioning of foster children during placement, and a meta-analysis conducted by Li, Chng, and Chu (2017) reported an improvement in psychosocial outcomes in favor of foster care when compared to residential care. Such mixed findings are likely due to factors such as study quality, measurement, source, the duration of and number of placements included in the studies, or to combinations of these factors (Li et al., 2017). In any event, with regard to foster care, both literature data and our empirical study showed that children in these settings, on average, have fewer and less serious psychosocial problems when compared to children in family-style group and residential care. Nevertheless, both sources also showed that a third to even more than half of foster children still demonstrate behavioral problems (e.g., Bernedo, Salas, Fuentes, & García-Martín, 2014; James, Roesch, & Zhang, 2012; Vanderfaeillie et al., 2013). This suggests that a considerable number of foster children are at risk of a placement breakdown.

With regard to residential care, the high number of children with psychosocial problems at the time of admission based on case file information (see Chapter 3) was not surprising; children with severe psychosocial problems are particularly referred to this setting due to its integrated and extended treatment milieu, which is assumed to be able to successfully address such severe problems (e.g., Conn et al., 2015; De Swart et al., 2012; Whittaker et al., 2015). Our findings support this suggestion, as the number of favorably developing residentially placed children was comparable to those found in the two family-based settings, despite the higher number of children with severe psychosocial problems at the time of admission to residential care.

Finally, the empirical findings concerning the level of psychosocial problems in children in family-style group care were remarkable. The high level of psychosocial problems reported by the group parents, combined with the aforementioned serious signs of social and emotional detachment, indicates that a significant amount of strain is placed on group parents right from the start of the placement (see Chapter 3). It is conceivable that these problems are, similarly to the baseline attachment problems, related to the last-resort position that family-style group care currently occupies in the Netherlands. Despite the finding that children in family-style group care do show a slight improvement in psychosocial (emotional) functioning, the mean posttest score remained at a (sub)clinical level. Thus, systematic screening of psychosocial functioning at the time of admission and additional treatment for children with clinical psychosocial functioning are recommended. This is especially important in family-style group care, as our findings suggest that group parents in particular require support to handle children with various severe social and emotional problems adequately.

Presence of child mental illness

The third baseline factor in the individual context which can be nominated as a building block for referral strategies is the presence of child mental illness. This risk factor is, among other things, related to behavioral problems, and, subsequently, to negative placement outcomes (e.g., Akister, Owens, & Goodyer, 2010; Raviv et al., 2010). Mental illnesses (such

as depression, anxiety, or post-traumatic stress disorder) in out-of-home placed children is often related to adverse family circumstances, such as child abuse or neglect (e.g., Swanke, Yampolskaya, Strozier, & Armstrong, 2016; World Health Organization, 2014). According to Akister et al. (2010), the prevalence of mental illness among children in care is approximately 50%; this is higher than for children with similar backgrounds who remain at home (Ford, Vostanis, Meltzer, & Goodman, 2007; Racusin et al., 2005), indicating that other factors, such as learning disabilities or neurodevelopmental disorders, also seem to be involved in out-of-home placed children.

Children with mental illnesses would be most represented in residential care (Akister et al., 2010; James, 2006; Tarren-Sweeney, 2008b). The findings from our empirical study confirm this, as the number of children with (an indication of) mental illness was significant higher (69%) for residentially placed children than for children in foster care (27%) or family-style group care (44%) (see Chapter 3). Moreover, particularly for residentially placed children, the presence of child mental illness was associated with unfavorable psychosocial development (see Chapter 5). Additional analyses showed, however, that psychiatrists were consulted approximately six times more often in family-style group care (59%) than in residential care (11%) (Leloux-Opmeer, Kuiper, & Scholte, 2016). In line with the prevailing findings, we therefore advocate structural assessment of a child's mental health at the time of admission and close cooperation between youth care services and mental health services in order to effectively address such problems, particularly in the case of residential care (Akister et al., 2010; Bai, Wells, & Hillemeier, 2009; Burns et al., 2004; Ford et al., 2007; Tarren-Sweeney, 2008b).

Age of admission and gender

Finally, the baseline factors *age of admission* and *gender* were found to be multivariately related to the level of psychosocial development, thus making it possible to also designate them as building blocks for the development of decision-making strategies for optimal out-of-home care. Although both baseline factors differ from the aforementioned factors in that they are intrinsically non-treatable, they can still be used for improving referral strategies and treatment conditions. With regard to gender, discriminant analysis showed that all of the favorably developing children in family-style group care were girls. Practically, this implies that, particularly for boys, psychosocial development should be monitored more closely and guided effectively when children are placed in family-style group care.

As for age of admission our findings seemed to indicate that older primary school-aged foster children, in particular are more likely to develop unfavorably. However, it cannot be ruled out that these findings partly reflect the current least restrictive policy, as described previously (see Chapter 1). Nevertheless, in practice, it is suggested that, when placing an older primary school-aged child in foster care, his or her psychosocial development should be closely monitored in order to provide timely support to the foster child and his or her foster parents if necessary.

Building blocks identified in the (substitute) family context

Family functioning in out-of-home placed children is important in many ways. First, from the perspective of the transactional model, the family context provides the most important context for a child's development. Aiming to address unfavorable child development therefore means, among other things, improving the interplay between a child and his or her family context (Kerig et al., 2012; Newton, 2017). Furthermore, risky family circumstances are a main reason for out-of-home placement, especially for young children (Esposito et al., 2013; Yampolskaya, Sharrock, Armstrong, Strozier, & Swanke, 2014). Addressing these risky circumstances during placement is a prerequisite for successful reunification (López, Del Valle, Montserrat, & Bravo, 2013; Vanderfaeillie, Damen, Pijnenburg, Van den Bergh, & Van Holen, 2016; Wulczyn, Chen, & Orlebeke, 2009). Finally, strengthening parenting capacities will contribute both to de-institutionalisation and to the prevention of out-of-home placement in the first place, both of which are priorities of the new Youth Act (Bosscher, 2014; Newton, 2017). In our study, two baseline factors in the (substitute) family context were identified as both building blocks for the development of decision-making strategies intended to improve matching to out-of-home care and as indicators of the need for preventive interventions intended to address co-occurring problems. These were the presence of a history of maltreatment and the quality of a child's pedagogical relationship with his or her substitute caregiver.

History of maltreatment

The first building block within the (substitute) family context is the presence of a history of maltreatment, which has detrimental effects on a child's development (e.g., Oswald, 2010; Stone, 2007; Stubenbort, Cohen, & Trybalski, 2010; World Health Organization, 2014). Approximately a quarter of abused children develops a post-traumatic stress disorder (World Health Organization, 2014); such a history carries the risk of intergenerational transmission of maltreatment (e.g., Buss et al., 2017; World Health Organization, 2014). As expected, a history of maltreatment was found to be related to unfavorable development; this relationship was most reflected in foster care (and, to a lesser extent, in family-style group care). Almost all (90%) of the unfavorably developing foster children had such a history. Surprisingly, however, having a history of maltreatment was also linked to favorable development in foster children. It was suggested that this contradiction may be attributed to the broad construct that was used to define maltreatment during the discriminant analyses (see Chapter 5). The results of both the scoping review (see Chapter 2) and the cross-sectional study (see Chapter 3) support this hypothesis, as differences were found between the three settings with respect to the different types of maltreatment. A history of child neglect was most frequently reported for foster children (60%) and, according to the literature, this form of maltreatment has the most serious consequences (Barber & Delfabbro, 2009; Spinhoven et al., 2010). The finding that neglect most commonly occurs in foster care may be explained by the accompanying high prevalence of individual parental problems, as reported in the scoping review. The results of the cross-sectional study accordingly showed that three-quarters of the biological parents of the children considered suffered from mental illness, and a similar number had material problems. Both are major risk factors for maltreatment and other adverse outcomes

(e.g., Pengpid & Peltzer, 2017; Reading, 2008; World Health Organization, 2014). The prevalence and the associated consequences of maltreatment outlined above emphasize the urgency for a systematic examination of trauma-related disorders and the incorporation of trauma-focused interventions into practice, as suggested by the literature (Den Dunnen et al., 2012; Oswald, 2010; Stewart, Leschied, den Dunnen, Zalmanowitz, & Baiden, 2013).

Quality of the pedagogical relationship

The second baseline factor that serves as building block for assigning additional support or treatment is part of the substitute family context and concerns the quality of a child's pedagogical relationship with the substitute caregiver. This factor was included in our study because the quality of a child's attachment is reflected in this pedagogical relationship (Koomen, Verschuren, & Pianta, 2007), and a healthy relationship with the substitute caregiver is positively related to age-appropriate psychosocial development (Bakermans-Kranenburg et al., 2011; Van den Bergh & Weterings, 2010; Whenan, Oxlad, & Lushington, 2009). According to the findings of the cross-sectional study, the overall quality of the pedagogical relationship shortly after admission was comparable between the settings, though some particular dimensions of the quality of this relationship differed negatively in the case of foster care. Foster parents reported relatively high levels of conflict and negative dependency at the time of admission, which seems to contradict the low prevalence of attachment-related problems in foster children at admission (as reported previously). However, combined with the finding that favorably developing foster children more frequently exhibited signs of negative dependency towards their foster parents shortly after admission, both findings can alternatively be perceived as healthy responses on the part of well-attached children to separation from their biological parents (Ainsworth, 1969; Bowlby, 1952). It should, however, be noted that this association with favorable development in foster children was particularly true for children who experienced mild problems in their pedagogical relationship with their foster parents. Overall, the findings suggest that the levels of conflict and dependency in the pedagogical relationship between a foster child and his or her foster parents should be closely monitored, as the severity of these problems serves as an indicator of whether immediate intervention is required.

PRACTICAL IMPLICATIONS FOR THE OVERALL CARE CONTEXT

As stressed in the general introduction, the current stepped-care model for referral to out-of-home care services has been operationalized and practiced in a very rigid manner. This has, among other things, contributed to both lengthy care pathways and substantial numbers of children and families who are not benefiting from the services and treatments offered. Since this was also reflected in our empirical study, it is recommended to shift towards the use of a matched-care model for allocation. Such a call for personalized matched care is also found in the literature, in which different expressions, such as "stratified care," "allocated care," and "(integrated) collaborative care" (Boyd, 2016; Henderson et al., 2017; National Institute for Health and Care Excellence, 2009; Van der Feltz-Cornelis, Van Marwijk, Hakkaart-van Roijen, Carvalho, & McIntyre, 2017), are used to refer to such a model. Regardless of the term chosen, in our opinion, three fundamental steps are required to

transform the current practice of out-of-home care services to the use of a more collaborative, effective, and matched-care model: (1) the implementation of integral risks and needs assessment, (2) an optimal matching of these risks and needs with an appropriate integral set of interventions, and (3) the use of outcome monitoring, with adjustments being made to services and treatment if necessary. In this way, a "collaborative matched-care model" emerges; such a model would be especially suitable for addressing chronic problems (National Institute for Health and Care Excellence, 2009; Van der Feltz-Cornelis et al., 2017), which often occur in out-of-home placed children and their families. The suggested steps, and their practical implications for the care context, are briefly discussed below.

Step 1: Implementing integral risks and needs assessment

Integral risks and needs assessment prior to (or soon after) referral to out-of-home care is essential in order to be able to provide matched and effective care and to support placement by providing suitable additional treatments. Such a comprehensive approach is consistent with the finding in both the literature and our empirical study that the cumulative effect of baseline (risk) factors co-determines the outcome of out-of-home placement. The results of an integral assessment will assist in determining who should be treated (risks), what should be treated (needs), and in which way (responsivity), as, for example, suggested by the RNR model developed by Andrews and Bonta (Andrews, Bonta, & Wormith, 2011; Bonta & Andrews, 2007). This will subsequently contribute to the prevention of over- or under-treatment (Van der Feltz-Cornelis et al., 2017). As outlined in the previous section, the seven identified baseline factors should, in any event, be assessed or at least taken into account due to their links with the degree and manner of a child's psychosocial development during out-of-home placement. Furthermore, assessing the need for (biological) family strengthening in order to (re-)enable the biological parent(s) to care for and support their own children is also indispensable for the goal of de-institutionalization (Newton, 2017).

Step 2: Matching a set of appropriate interventions

For well-informed and optimal matching of 24-h settings to baseline child and family risks and needs, several preconditions should be taken into account. First, evidence-based knowledge is required concerning the extent to which the various settings of out-of-home care can promote positive psychosocial child development and family development given the baseline child and family risks and needs in a particular case. Based on our empirical findings, it could be broadly concluded that (1) foster care is particularly suitable for young maltreated children with singular, minor individual problems; (2) placement in family-style group care is most appropriate for older, well-attached primary school-aged girls with mental health issues that are not accompanied with serious psychosocial dysfunction; and (3) residential care is most suitable for older, maltreated and social-emotionally detached children with serious psychosocial problems but without underlying mental illness, who require a (short-term) integrated educational environment for intensive and restrictive treatment on multiple areas (such as individual, school, family, peers). To move forward, these findings should be combined with existing knowledge concerning crucial baseline factors from the literature data in order to develop comprehensive evidence-based decision-

making strategies for out-of-home care (e.g., Akister et al., 2010; Chor, McClelland, Weiner, Jordan, & Lyons, 2012; Vanderfaeillie et al., 2016).

The second condition for well-informed matching is the importance of recognizing which aspects of each setting carry the benefits and which the risks (Li et al., 2017). Our empirical findings showed, for example, that children with no or mild attachment-related problems are disadvantaged in residential care and may benefit more from a home-like setting with live-in caregivers. In contrast, maltreated children with severe psychosocial problems, signs of detachment, and school-related problems were found to develop unfavorably in family-based settings in particular and would benefit more from an integrated treatment setting with an incorporated school. Beyond that, in every case, it should be considered whether an out-of-home placement, in itself, will prove more harmful rather than beneficial in terms of the development and well-being of a child (e.g., Bruskas, 2008; Pinto & Maia, 2013; Schneider & Phares, 2005). A systematic review of long-term results of former out-of-home placed children compared to long-term results of peers from general populations revealed, for example, that the former more frequently suffered from mental health issues and had a higher prevalence of substance abuse (Gypen, Vanderfaeillie, De Maeyer, Belenger, & Van Holen, 2017). They also achieved high school diplomas less frequently and completed post-secondary schooling even less frequently (Gypen et al., 2017).

Third, we plead for a deepening of the continuum of out-of-home care by means of adapting and expanding the current services to improve matching. The usage of family-style group care could, for example, be expanded further, as this setting is an almost ideal type of substitute care, due to its home-likeness and the presence of pedagogically trained in-home caregivers (Van IJzendoorn et al., 2011). Furthermore, there is an increasing demand for the deployment of treatment foster care services (Farmer, Wagner, Burns, & Richards, 2003; James, 2006; Racusin et al., 2005; Villagrana, 2010). The emphasis on expanding and strengthening both family-based settings is strongly in line with the aims of the current transformation of the youth care system. The deepening of the continuum should also involve the development of new, combined types of 24-h care for the risks and needs of children that, thus far, we have been unable to address. For example, the strength of family-based settings, including the possibility of stable, long-term relationships, could be combined with the integrated and extended treatment and educational possibilities offered by institutional environments by establishing small family-group homes in such environments, in order to treat children with serious, multiple long-term problems from very dysfunctional families. Such combinations of care services are referred to as “mixed models of matched care” (Boyd, 2016).

Finally, in addition to the need to deepen the 24-h care services outlined in the preceding section, we urge a broadening of the care services in order to achieve optimal matching. This means crossing boundaries by entering into interorganizational relationships with other sectors concerned with care services, such as education, justice, addiction treatment centers, domestic violence agencies, child and adult mental health service providers, and debt assistance (Bai et al., 2009; Burns et al., 2004; World Health Organization, 2014). The results of this study showed, for example, that both material problems and parental mental illness are often co-occurring problems in the lives of out-of-home placed children, implying that additional adult services are urgently required. Addressing multiple risks and needs thus

requires a set of interventions in addition to out-of-home placement on its own. Although combining placement with additional, personalized child and family interventions from different sectors of care services may seem more expensive or less efficient in the short term, it will, in our opinion, increase effectiveness and efficiency in the long term.

Step 3: The use of outcome monitoring

A third step for increasing the effectiveness of youth care services is to use routine outcome monitoring (ROM). Routine outcome monitoring data can provide practitioners with alerts that indicate whether or not the provided services and treatment are effective, ineffective, or even harmful; in that latter case, such alerts indicate a need to adjust the services or treatment in question (Boswell, Kraus, Miller, & Lambert, 2015). Furthermore, by combining ROM data concerning various baseline child and family characteristics, it becomes possible to distinguish between different diagnostic subgroups. This results in a differentiation of knowledge concerning effectiveness and subsequently allows better matching between risks and needs on the one hand and the preferred treatment on the other (De Beurs et al., 2011). Providing feedback concerning the results to both clients and practitioners is, however, a prerequisite in this (Bickman, Lyon, & Wolpert, 2016; Boswell et al., 2015; De Beurs et al., 2011).

STRENGTHS, LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

Strengths and limitations

Although our thesis yields interesting information concerning the similarities and differences in the baseline characteristics and the psychosocial development of children in various settings of out-of-home care, some limitations should be considered. First, the quasi-experimental design used in the empirical study may have increased the likelihood of systematic differences and regression to the mean. However, randomizing the allocation to a certain type of 24-h care was not an option for ethical reasons. Furthermore, by relying on common practice, the study approximated reality to the greatest degree possible (Barber & Delfabbro, 2002; Wilson, Sinclair, Taylor, & Pithouse, 2004).

Second, a limited number of children in family-style group care participated in the empirical study, which may have hampered statistical power. Nevertheless, combining both family-based settings (foster and family-style group care) to enhance the statistical power of the study was not an option due to large differences in baseline child and family characteristics. Furthermore, the triple comparison of the three main types of care is a major strength of this study, as no other studies that conducted such a comparison were found. Moreover, effect sizes for all of the statistical findings were added in order to provide insight into the possible influence of a lack of statistical power (Cohen, 1992).

Third, the comparison between the three main settings would have been more complete if all of the baseline factors related to outcomes had been included (e.g., a child's learnability/IQ, quality of care, additional therapy provided, etc.). However, only major baseline child, family, and care characteristics based on both literature data and empirical findings, were included in this study. Adding additional factors to this set would have negatively affected the statistical power and the interpretability of the findings.

Finally, the findings showed that the positions of Dutch family-style group care and residential care on the continuum of care seem to differ slightly from those reported in the international literature. This should be taken into account when comparing the findings with other research data. However, the findings related to the family-based and residential settings are still considered relevant, regardless of the structure of the continuum of care in a particular nation.

Directions for future research

Based on our study's findings, the following directions for future research are suggested. First, which types of maltreatment specifically affect unfavorable psychosocial development in foster children should be further investigated. Refinement of this building block would result in better defined subtypes of foster children. These could be used to refine referral to foster care services and additional treatments, which is expected to promote the appropriateness and effectiveness of foster care placements.

Second, it is recommended that the psychosocial development of psychosocially healthy foster children from dysfunctional families of origin be compared with that of children of a similar background who remained at home and received in-home support services. The findings showed that such foster children, in particular, develop in a psychosocially unfavorable manner. It is possible that these out-of-home placed children are ultimately at a disadvantage due to the immense stress of being removed from their biological parents.

Third, little is currently known about the exact relationship between school-related problems and placement outcomes (De Swart et al., 2012; Pritchett, Gillberg, & Minnis, 2013). Nevertheless, school-related problems are associated with level of psychosocial problems (Barber & Delfabbro, 2002; Karen Shelly, James, & Donald, 1996), and problems in school performance seem to negatively affect both short- and long-term outcomes. The findings of our empirical study showed that residentially placed children have significantly more school-related problems (83%) compared to children in family-based settings. These findings most likely have to do with selection bias, as children with such problems are generally referred to this type of care because of the (usual) availability of an incorporated school. However, this does not apply to family-style group care, while two-thirds of children placed in such care also demonstrated problems in terms of school performance. Moreover, additional analysis showed that a significant number of primary school-aged children (11%) in family-style group care exhibited truancy during the first year of placement (Leloux-Opmeer, Kuiper, & Scholte, 2016). In this context, we therefore agree with Karen Shelly et al. (1996) and Akister et al. (2010) that efforts are needed to increase knowledge concerning the prevalence of school problems experienced by children in care and to monitor children's school performance during placement, as both will contribute to success and well-being in adult life.

Finally, future research should focused on other outcome measures (or combined thereof) beyond solely a child's psychosocial development, although this measure is considered to be an important determinant in the success of out-of-home placement (Li et al., 2017; Goemans et al., 2015; Minty, 1999). It is likely that a more comprehensive impression of both the vulnerability and resilience of an out-of-home placed child can be obtained by combining several outcome measures. Suggestions include, for example, the development of family

functioning, the development of school functioning, program completion, or type of discharge setting.

General Conclusion

Recently, efforts have been made to reduce the use of specialized (out-of-home) care services in order to limit the ever-increasing costs associated with them and to increase the quality of the remaining specialized care services. In pursuing this endeavor, the findings of our study plead for a shift towards a collaborative matched-care model for allocation to out-of-home care services. To achieve an optimally suitable set of intervention(s), allocation should firstly be based on an integral risks and needs assessment in all developmental contexts at the time of admission. In addition, both a deepening and broadening of the current youth care services are essential by means of a coordinated collaboration both within the various types of 24-h care services and between different sectors for child and adult services. Only then the charted risks and needs can be matched to a personalized set of combined interventions for both a child and his or her family. During this matching process, any of the possible negative side-effects of a particular type of 24-h setting should also be taken into account. Finally, we strongly recommend monitoring both short- and long-term placement outcomes in order to be able to constantly retune decision-making processes. Taking all of these steps, from integral assessment to matching to monitoring and to feedback processes, will result in a data-driven evidence-based approach to clinical decision-making and will likely yield a more efficient and effective out-of-home care services.

The plea for matched care implicitly argues against the (rigidly used) least restrictive policy. In our opinion such a policy will not contribute to the aim of increasing the effectiveness and efficiency of (24-h) youth care services. Not “the least restrictive” but “as intensive and restrictive as necessary” should be the credo.