Changes in the quality of attachment of children in long-term foster care in France?

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Abstract

Within a developmental approach, this longitudinal research draws from attachment theory and contemporary research to analyse the evolution of the quality of attachment in children placed in family foster homes. Initially, 36 French children aged an average of 52 weeks were interviewed with the Attachment Story Completion Task. Six years later, 22 children from the initial group now aged an average of 121 months were asked to complete French versions of the Inventory of Parent and Peer Attachment and the Adolescent Unresolved Attachment Questionnaire. The results show that these children develop a peaceful emotional relationship with caregivers after six years of fostering, but still have feelings of fear and anger related to the attachment relationship with their father or their mother. The children we met had thus developed two attachment relationships of different qualities, at least one of which was secure.

Keywords: Attachment, foster family, longitudinal study, child, long-term

Introduction

Long-term fostering of a child in the context of child protection services has for a long time been a subject of debate in France; a debate that continues up until today and that is centred around several 'imperatives' like: maintain the ties between the child and the birth parents; encourage the emotional security of the child in the foster home; and guarantee the stability and continuity of care for the child under protection. Current French law¹ grants protective measures for a maximum of two years, renewable up until the child's 18th birthday, the age of legal majority. Thus, long-term care is not legally recognized, as is the case in other countries, as a 'life project' for the child (Ouellette & Goubau, 2009). Emotional ties that have been created with foster carers are not recognized legally, even though the most recent law on child protection has the effect of stabilising the path of children through the system, in particular by avoiding transfer from one facility or home to another. Yet one of the objectives of family foster care as a protective measure is to enable the child to find or rediscover emotional security, in particular through a relationship with the caregiver² who can offer stability,

1 French law dated the 14th of March 2016, reforming child protection services (2016-297).

2 The most recent law modifying the status of foster families (French law n° 2005-706 dated 27th June 2005 regarding infant and family caregivers) defines the role of the assistant familial: "Article L. 421-2. – The caregiver is the person who, in return for remuneration, regularly and in a permanent way welcomes minors and young people under the age of twenty-one in his or her home. This activity is part of the overall child

attention and affection (Appel & David, 1973; Berger, 1997). Indeed, the caregiver (in French, assistant familial) takes care of the child both physically and psychologically. At the same time the child's parents hold parental authority; the parent-child ties need to be maintained in the event of the child's return to the birth family and also because the child should remain aware that (s)he is part of a family. In this context, providing emotional security to children is a significant undertaking with high stakes. Although it is now accepted (and written in law) that children need to develop secure attachments in foster homes, we still have very little empirical evidence on the emotional development of these foster children in France that underpins the achievements in reality³.

Against this background a longitudinal study was carried out with the goal of providing well-documented information on three questions:

- What is the quality of attachment of young children in foster families?
- How does the level of internal emotional stability evolve for children in long-term foster care?
- What are the contextual elements that influence the quality of attachment of children in foster homes over a long term?

protection programme. The caregiver is a salaried professional who has received certification. The caregiver and the other people residing in the home are the foster family."

3 On the 31st of December 2012, 133,000 minors under the age of 18 were subject to a placement order, resulting in a placement in a foster family (53%), an institution (38%) or a 'lieux de vie' (living facility) (9%) (ONED, 2013).

Quality of attachment of foster children

The quality of attachment of foster children under child protective services in France is not well known, as no large-scale studies have been undertaken. Looking at the available samples from different studies carried out with foster children aged under 30 months, the categorisation of the style of attachment was most often made using the Strange Situation model (Ainsworth, Blehar, Waters, & Wall, 1978), which distinguishes four attachment patterns. Secure attachment corresponds to the possibility of relying on the caregiver as a secure base when the child needs it and for exploring the environment. So-called 'avoidant' insecure children avoid proximity with their attachment figure and hide their distress through continual exploration. So-called 'ambivalent-resistant' insecure children show a constant need for reassurance from their attachment figure and cannot manage their distress in alarming situations (attachment-relevant situations) (Ainsworth et al., 1978). While the proportion of secure children varies from one study to another, it is essentially a function of the numbers of 'disorganised' children. Indeed, the majority of studies agree that we observe a prevalence of disorganisation among children in care, compared to the population as a whole. American studies have found the following proportions for children aged 30 months in care: 46% of the children feel secure, 42% are disorganised, 8% resistant, and 4% avoidant (Bernier, Ackerman, & Stovall-McClough, 2004; Bernier & Dozier, 2003; Dozier, Stovall, Albus, & Bates, 2001; Stovall & Dozier, 2000). This spread is noticeably different from the one observed in ordinary children from the American middle class by Ainsworth in 1989: 66% secure;

21% resistant; 12% avoidant, and 1% disorganised (Barthélémy, Golse, & Bullinger, 2004). More recently, Jacobsen and colleagues (2014), studying a group of 37 foster children aged three, observed a percentage of 67.3% with secure attachment and 5.5% with disorganised attachment. This observation corresponds to the conclusions of the meta-analysis made by Van den Dries and colleagues in 2009, which showed a high proportion of disorganisation but a similar level of security among groups of children (in care or not). Therefore it appears that the modes of insecurity determine the specific quality of attachment of children in care.

The quality of the attachment of children in care should also be analysed with regard to aspects of the child's life, such as the age of the child when the separation from the parents occurred. One year of age seems to be a point in time beyond which foster children appear to become less securely attached (Stovall & Dozier, 1998). The age effect, linked to the child's maturity, combines with the fact that many foster children lived through difficult experiences such as abandonment, neglect and abuse in their original homes or during repeated institutionalisations. These factors play an important role in creating future attachments (Bernier et al., 2004; Chisholm, Carter, Ames, & Morison, 1995; O'Connor, Marvin, Rutter, Olrick, & Britner, 2003; Rutter, 1998; Zeanah, Smyke, Koga, & Carlson, 2005) in combination with the quality of the relationship the child develops with the new adult caregiver (Cole, 2005; Euillet & Zaouche-Gaudron, 2007).

According to the main theories of attachment, a new attachment relationship is created over time and in a conext where the adult takes care of the child. Thus, the context of the foster family is favourable to the

caregiver becoming a new attachment figure for the child. Work on the multiple attachments formed by a child supposes that a child has several internal models at work, developed with different attachment figures (Schaffer & Emerson, 1964). Using information gleaned on the hierarchy and the simultaneity of these relationships, studies on the attachment relationship with the father have demonstrated the simultaneous co-existence of internal working model of different qualities (Labrell, 1992; Lamb, 1978; Le Camus, 1995). More recently, studies on non-parental day care arrangements have also revealed that these multiple relationships include professionals in early child care. With regard to adolescents in care, a study by Moore and Palacio-Quintin in 2001 showed the singularity of each attachment in the context of a foster home; adolescents in foster care clearly distinguished the quality of their attachment to the four main figures involved (birth parents and foster carers).

In this context of multiple attachments, successive and complementary, the question can be raised if and how the quality of attachment of the child under protective services changes over time?

Development of attachment relationships

In early childhood, the internal working models of the child are at a primary level of development. Very young children are more malleable than children of school age and therefore more easily influenced by contextual factors that impact the parents' capacity to care for their children (Isabella, 1993; Isabella & Belsky, 1991). School-aged children have internalised more stable internal

working models that have some resistance to change (Bretherton & Munholland, 1999). Bowlby (1978) describes a level of maturity at about age three in the construction and representation of attachment figures that help the child live through separation more serenely. After that age, the attachment relationship moves into a consolidation phase, following the phase of construction. In addition, the development of emotional security during childhood is grounded in the availability and sensitivity of the caregiver and the dyadic adjustment between the child and the adult. During adolescence, this availability is especially important as it concerns communication and negotiation whereby the child can express his or her emotions, difficulties and projections for the future, both short and long term, feeling free and heard. For Dykas and Cassidy (2007), communication constitutes an attachment relationship in which the adolescent perceives the adult as a secure base.

Beyond the developmental changes in attachment, many studies show that attachment patterns last throughout childhood and adolescence with very little change. Grossman and colleagues found in a normal population an 82% rate of stability from infancy through age six, and 70% from the child at age one through the adult age of 20 (Grossman, Grossman, & Zimmerman, 1999). Ammaniti and his colleagues (Ammaniti, Van IJzendoorn, Sperenza, & Tambelli, 2000) found a percentage of stability close to 74% between ages 10 and 14. Note that the stability of the quality of attachment during development mostly concerns security patterns (Barnett, Ganiban, & Cicchetti, 1999; Carslon, 1998).

However, the stability of an attachment pattern from childhood through the adult

age can be altered if a major event occurs that introduces psychosocial risks in the life of the child or the caregiver (Weinfield, Whaley, & Egeland, 2004). It is clear that a child protection measure results in the separation of parents and children when the child is sent to an unfamiliar family environment. Placement constitutes such an event and may modify the quality of established relationships and the emotional security of the child. A child protection measure means a separation of parents from children when the child is placed in an unknown family environment. Placement can be considered such as an event, and may modify the quality of established relationships and the affective security of the child.

Evolution of quality of attachment of foster children

Studies carried out with foster children show that time spent in care and the duration of care are decisive factors concerning the security of attachment (Eagle, 1994; Larsson, Bohlin & Stenbacka, 1986; Marcus, 1991; Schofield & Beek, 2005; Stovall & Dozier, 1998). Lang and his colleagues (2016) recently showed that attachment security increased significantly over the first year of care for children aged less than 24 months at the time of separation. Working with adolescents, Howes (1990) observed that after two months in foster care, 47% of the children in the sample developed a secure attachment to their caregivers. At the same time, children having experienced many changes of caregiver in early childhood developed less satisfactorily than those who did not change so often (Stovall & Dozier, 1998, 2000). Multiple placements during childhood often mark the beginning of relational problems that

extend into adulthood (Fonagy et al., 1996). Often these children encounter major difficulties making new attachments (Gauthier, Fortin, & Jéliu, 2009). Several studies focusing on the future of foster children have shown the positive effects of a stable foster home on adult life (professional success, living as a couple, housing) (Courreaud, 1998; Potin, 2012; Quinton, 1989; Zimmerman, 1982), including a reduced risk of psychopathological problems (Kortenkamp & Erle, 2002; Orme & Buehler, 2001; Richardson & Lelliott, 2003).

Method

Procedure

Thanks to a partnership with two *Conseils Départementaux*⁴ (Departmental Councils, the administrative entity in France that manages child protection services), our research was carried out over six years, with *two phases* for collecting data (see below). During the first phase, children had to be three years old (plus or minus 12 months) and in foster homes for at least the past six months. Among the children corresponding to these criteria, the choice was made in conjuction with the team of social workers who took into account the appropriateness

4 Child protection services are decentralised in France and under the auspices of 100 Conseils Départementaux. Each has a Children's Social Services department in charge of implementing child protection measures, whether judicial (enforced by the children's judge) or administrative (when the parents give their agreement or request themselves a placement).

of a meeting with regard to the child's current situation (new place, recent separation experience) and with an ethical concern to protect the child from any disturbance the meeting might induce. After a detailed presentation of the research to those holding parental authority over the children, written agreement was obtained. The researcher ensured anonymity and confidentiality. The children also gave their consent after hearing an explanation of the research and being informed that they could end their participation at any time. During both data-gathering phases, the meetings took place in the foster homes. The interval between the two data interviews was an average of six years.5

Sample phase 1

For phase 1, the researchers met 36 children (16 boys, 20 girls) in 32 foster homes.⁶ The average age of children was 52 months, i.e. four years and four months (SD=14,7).

Instruments phase 1

Informative questionnaire on children's general situation. The situations of children in protective care, in family homes or institutions, are extremely varied, but can be compared using precise information, gleaned from a questionnaire. The information covers:

- 5 Average = 5.9 years; SD = 0.6; Min = 4.8 years; Max = 6.9 years.
- 6 Some children were in the same foster family, in particular for the case of siblings.

- the child: current age, gender, level of schooling;
- the child's family: age and profession of parents, marital status of each parent, brothers and sisters;
- the foster home: age, experience and family make-up of the foster home (spouse's profession, age and place of residence of children), age and length of stay of other foster children;
- the child protection measure: date and type of measure (legal or administrative), type, duration and frequency of meetings between the child and the parents.

Attachment Story Completion Task (ASCT). The ASCT, created by Bretherton, Ridgeway and Cassidy (1990), looks at themes with the objective of activating the child's attachment system. This method makes it possible to bring out the attachment representations of young children, through six 'warm-up' story stems, played out with small family figures (father, mother, child and grandmother) and a little equipment (table, chair, etc.). These story stems are designed to stimulate feelings and emotions related to the attachment figures: reaction to a reprimand, fear, pain, consolation, protection. The last two stories look at the issues of separation and its corollary, reunion, which may give rise to emotions such as separation anxiety, feelings of abandonment, resentment, or the desire to make amends. The child was asked to 'show and tell' what happened next (Miljkovitch, Pierrehumbert, & Halfon, 2007).

The coding system used in this research was developed by Miljkovitch and his team (2003). This is in the form of a Q-Sort made up of 65 items, making it possible to locate each child on a continuum of seven dimen-

sions or scales: collaboration, representation of parental support, positive narrative, expression of appropriate feelings, reaction to separation, symbolic distance, and weak narrative skills7 (Miljkovitch, Pierrehumbert, Karmaniola, & Halfon, 2003; Miljkovith & Pierrehumbert, 2008). Each item corresponds to a description of the child's narratives or behaviour and must be placed with respect to the degree of similarities with the subject, taking care that the division of items follows a normal distribution. The more the item is characteristic of the subject, the higher the score (from 1 to 7). Then we carry out the calculation of the distance between the subject's response and several prototypes (defined through Miljkovitch's research on 142 children⁸), which correspond to different attachment strategies.

- 7 Collaboration: the child is interested in the task and the subjects. Representations of parental support: the parents are seen as available and protective. Positive narrative: the tone of the scenario is positive. Expression of appropriate feelings: the child spontaneously refers to appropriate emotional states that are expressed through the game. Reaction to separation: the child reacts to the departure of the parental figures by preventing them from leaving. Symbolic distance: distance maintained from the acts and emotions suggested by the game. Weak narrative skills: incapacity to build coherent and structured narratives.
- 8 For each scale, an inter-rater reliability coefficient was determined and calculated according to the order of the scales: .91, .84, .88, .79, .87, .84, and .89, as well as Cronbach's alpha to evaluate internal coherence: .93, .92, .82, .81, .70, .62 and .80. These tests were made with reference to 142 children aged between 36 and 41 months (Miljkovitch et al., 2003).

According to the scores attributed on the scale, an additional score on four axes is calculated, showing the quality of the child's representations of attachment: secure attachment, deactivation of the system of attachment, hyperactivation of the system of attachment, and disorganisation. The categorisation of the child according to the type of attachment concerns his/her representations of the quality of attachment in a non-specific manner in relation to an attachment figure.

Sample phase 2

Among the 36 children interviewed in phase 1, the majority (n=33) were still under protective measures in phase 2. We were unable to interview the three children who had returned to their parents; they had moved and the local social services could not locate them. Eleven other children could not be interviewed for at least two reasons:

- Social workers found the moment inadequate in four situations, because of the difficult circumstances (death of a parent, sudden change of foster family, upcoming hearing, significant conflict between the parents and the institution, etc.).
- No parental agreement: four parents did not respond (could not be reached) and three parents refused that their children participate a second time.

During the second phase, we interviewed 22 children (8 boys, 14 girls) in 18 foster families. The average age was 10 (121 months mean, SD=15,9). When first placed, the children were 22 months old on average. They had been with their current caregiver

for 6.5 years (78 months). Six children had recently changed foster families.

Instruments phase 2

Children's life course. Considering the life course of the child and all of the events encountered as shedding light on the development of the child, a set of information was put together on the life course, including changes in the family situation since the first interview. The following information was collected from assigned social workers:

- The living situation of the child:
 - If the child has been in the same foster family in the period between the two interviews: age, sex and length of time each child has been in the foster home; the departure and arrival of other foster children,
 - If the child has been in different foster homes: date, number, length of time and reason for change, type of living situation. Age, sex and length of time each child has been in the present foster home,
- The situation of the birth parents: notes on any modification of the family structure (birth of siblings, change in marital status of either or both parents, deaths, etc.) and the professional situation of the parents.
- The nature of the placement: change in the type of placement (legal ruling, for example), changes in the kind, length and frequency of parental visits, appointment of a family to provide relay

care⁹, changes in the professional case-worker.

Then, two tools to measure attachment were selected. In this context it should be noted that researchers are regularly confronted with methodological difficulties due to the absence of well adapted tools for measuring the development of children in care. This can be explained first of all by a lack of easy access to this population, but also to a more general conceptual issue. What is at stake with regard to the design and validation of tools for measuring the development of these children, taking account of their specific family/social situation? This basic question feeds the debates surrounding the concept of the psychopathological development of these children. The choice of tools used with ordinary children also offers a possibility for comparison and/or comprehension with other more or less specific populations. In addition, among the existing tools, few have been translated/ validated in French, few take direct account of what children/adolescents say, and few focus on the pre-teen period. Thus, the two following tools were tested with a 9 year old pre-teen in a foster home to ensure that the questions were understandable. Furthermore, the choice was made to use two distinct tools to mobilise the relationship with the foster family and the biological parents. Children in care may be caught up in internal conflicts that touch on belonging and family membership, which might be stirred up by the use of a single tool that could gen-

⁹ A family providing relay care is a second foster family that takes in the child when the first family is unavailable (time off, illness).

erate comparisons of different attachment figures.

Questionnaire d'Attachement Non-Résolu à l'Adolescence (OANRA). We used the OANRA (Thibaudeau, 2006), the French (Québec) translation of the Adolescent Unresolved Attachment Ouestionnaire (West, 2000). In our research, the QANRA was administered twice, once with regard to the relationship with the mother and a second time for the father. Indeed, the adolescent responds to items with regard to the relationship with 'the person who most often took care of you between birth and the age of five'. Even though children might be placed away from their parents for a long duration, this tool allows to call back memories of primary relationships with the attachment figure. This valid tool¹⁰ makes it possible to assess 'unresolved attachment' and concerns the child's primary relationships. It evaluates the adolescent's perception of unresolved attachment experiences in the emotional relationship with his/her attachment figure, based on a conscious discourse. Studies on non-resolution show that the constant activation of the attachment system has its origins in early interactions and may be adjusted once the child is able to mentally formulate his or her memories (Aikins, Howes, & Hamilton, 2009; Ongari, 2006; Solomon & Georges, 1999). It is made of ten items with a scale of responses from 1 (strongly agree) to 5 (strongly disagree), enabling the calculation of an overall non-resolution score (from 10 to 50; M=30). The

lower the score, the greater the resolution and serenity of the attachment to the figure considered in answering the questions. A higher score, on the contrary, may indicate attachment problems. It includes three scales (of which the second and third assess the negative feelings that may be felt by the adolescent when the caregiver is not able to respond to his/her needs):

- Failed Protection Scale (from 0 to 20).
 This score reports the feeling of protection the adolescent has with regard to the attachment figure.
- Anger/Dysregulation Scale (from 0 to 15).
 A low score reflects a calm nature; a high score indicates significant feelings of anger.
- Fear Scale (from 0 to 15). A low score can be interpreted as a good feeling for the attachment figure. A high score shows significant fear, feelings of distress and vulnerability.

Inventaire d'Attachement Pour les Adolescents (IAPA). We used the IAPA (Larose & Boivin, 1991), the French version of the Inventory of Parent and Peer Attachment (IPPA, Armsden & Greenberg, 1987, revised in 1989). In this research it is used to evaluate the relationship with the caregiver. In agreement with Bowlby's theory (1978), this questionnaire evaluates the general quality of the parent-child attachment relationship with regard to perceived security. This tool makes it possible to infer the adolescent's current representations of an attachment relationship with regard to the availability and responsibility of the attachment figure on the one hand, and any hostility or despair he or she feels for the figure on the other hand. An overall score for perceived security is obtained in order to qualify the type of attachment the ado-

¹⁰ On the sample of 398 adolescents aged 15 years and 7 months on average, the coefficients of internal coherence (Cronbach's alpha) for the three scales range from 0.74 to 0.82.

lescent experiences: secure, ambivalent or avoidant (Armsden & Greenberg, 1987).¹¹

The inventory includes 25 items scored on a scale from 1 to 5 (1 = not at all what I feel; 5 = exactly what I feel) with three subscales: Confidence (9 items), Communication (10 items), and Alienation (6 items). According to Armsden and Greenberg (1987), the differentiation of scores into three classes according to the standard deviation from the mean (low, average, high) is capital for understanding the balance and trends of security. This tool has already been used constructively with adolescents in care homes (Moore, Palacio-Quintin, & Lacharité, 2003).

Conditions for administering the guestionnaires

The application of the two questionnaires has been adapted to the specific population under study, with regard to the emotional vulnerability of these children and their level of vocabulary. The self-reported questionnaire was completed during an interview with a psychologist who read out the questions and showed the possible responses written on cards (placed in the order

for Confidence, Communication and Alienation

were 0.92, 0.82 and 0.85 (Larose & Boivin,

1991). In the same way, the factor structure and

the correlations are stable, according to whether

the subject responded with regard to the mother

or the father.

of the scale of responses possible for each tool). During the pre-test of these tools, it was clear that the children had difficulty in memorising the five levels of answers or even understanding the graduation. The cards created a visual point of reference that lowered the risk of automatic or random answers.

The order of the tools was considered in terms of what might be elicited from the child. For example, to avoid creating internal conflicts or generating a halo effect, the mother and the caregiver were not the subject of identical inventories: QANRA for the birth parents (mother and father), and IAPA for the foster mother.

These two tools concerning three attachment figures (mother, father, caregiver) were not completed by all of the children. Indeed, some children in the sample had not seen one of their two parents for several years because of their situation: ward of the State, orphan (father or mother), father unknown, or absence of visiting rights. The IAPA, examining the relationship with the caregiver, was completed by 22 children. The QANRA referring to the mother was completed by 19 children. The QANRA for the father was completed by 11 children.

Results

Children's characteristics and life course

Judicial measures leading to placement concerned 84% of the children sampled in the first series of interviews and 88% in the second series. On the national level judicial measures represent 75% of placement proceedings (ONED, 2013).

Age and length of foster care

Although there is a large age span of the children in the phase 1 sample (from a few days to 58 months), many of the children (n=25) were under 24 months old when they arrived in foster care. The average age of children when the placement measure took effect was 21 months (SD=15; see also table 112). The data are relatively identical for phase 2, when 22 children were interviewed. Indeed, when first taken into the foster care, the children were aged on average 22 months (SD=14), with a span of 1 to 58 months. The children had been separated from their parents for an average of 52 months for the phase 1 (SD=20) and 99 months for phase 2 (SD=17).

For phase 1, the children had been fostered for an average of 30 months (SD=17) with the caregiver; for phase 2 the mean was 78 months (SD=44). However, during the second interview, six children had recently been moved to new families (living there between 2 to 30 months), which lowers the average length of stay considerably. If these

data are pulled from the calculation, the average is 102 months. The median value of 90 months therefore seems to be a more accurate representation.

Stability and change in foster home

Among the 22 children in phase 2, 73% (n=16) were still living with the same foster family and 27% had changed (n=6). Among the latter, two had changed foster homes three times. The reasons for change included the caregiver's retirement, and a request from the caregiver to be 'relieved' of a child whose behaviour was an issue.

Meetings between parents and children

During the first interview, 55% of the children (n=21) had not met with their father since the judicial measure had gone into effect for various reasons (unknown, deceased, whereabouts unknown, refusal to accept the measure). In addition, 18% (n=7)

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|----------|-----------------|-------------|-----------|
| Table 1. | Characteristics | of chilaren | in sample |

| Characteristics | Phase 1 (N=36) | | Phase 2 (N=22) | |
|---|----------------|---------|----------------|---------|
| | Mean (SD) | Min/Max | Mean (SD) | Min/Max |
| Age at time of data collection | 52.1 (14.7)* | 19/80 | 121.2 (16.9) | 94/146 |
| Age at time of judicial measure | 21.3 (15.3) | 0/58 | 22.1 (14.5) | 1/58 |
| Length of separation from birth parents | 51.6 (19.9) | 12/68 | 99.3 (17.3) | 77/133 |
| Duration current foster care placement | 30.3 (17.3) | 4/68 | 78.4 (44.0) | 2/133 |

^{*} Numbers refer to number of months.

¹² In the main text we only report rounded numbers without decimals.

did not see their mother. In other cases, the two most common types of encounters were: mediated visits¹³ in a neutral place, in the presence of at least one social worker, involving 14 mothers and 9 fathers; and visits on the premises of a social centre without direct supervision by the social workers, involving 10 mothers and 5 fathers. The mother/child and father/child visits lasted two hours or less. Among the children, 43% (n=15) met with their mother twice a month and 28% (n=10) once a week.

Between the two phases, we observed a lower frequency of mother/child visits for 14 dyads. In addition, there was a marked reduction of mediated visits (down 50%), in favour of meetings at the parent's home with an overnight stay (up 60%). The type of meeting shifted to tighter supervision by the institution in 30% of the cases and greater leeway in 53% of the cases. For 17% of the children there was no change. Furthermore, the duration of visits increased

13 Mediated visits are held between the parents and the children in a neutral place with constant monitoring by at least one social worker, according to a schedule and for a length of time determined by the children's court judge. in six situations (i.e., 30%) and decreased in only one case (5%).

Changes in level of affective security

Quality of attachment in phase 1

There was no attempt to differenciate in the first round of interviews whether the attachment representations were with respect to birth or foster families. The analysis of attachment story completion reveals that 69% (n=25) of the children interviewed in phase 1 had secure attachment representations (table 2). No children showed hyperactived and disorganised attachment while 31% of the children showed deactivated attachment representations (n=11).

The scores given to each of the four types of attachment (table 2) makes it possible to identify trends in attachement strategies adopted by the children. Even if the children do not have disorganised internal attachment representations (M=46,2; SD=6,7), the score established does show that the children nonetheless fall back on

Table 2. Distribution of scores with regard to type of attachment, as obtained with ASCT (Phase 1, N=36)

| Type of attachment | Number of children * (percentage) | Mean score (SD)** | Min/max score |
|--------------------|--------------------------------------|-------------------|---------------|
| Secure | 25 (69.4%) | 50.6 (8.1) | 32/65 |
| Deactivated | 11 (30.6%) | 50.1 (8.3) | 35/67 |
| Hyperactivated | 0 (0%) | 42.2 (7.3) | 30/62 |
| Disorganised | 0 (0%) | 46.2 (6.7) | 36/62 |

^{*} Number of children primarily characterised by type of attachment.

^{**} The theoretical Mean in a normative population equals 50 (SD=10) (Miljkovitch et al., 2003)

disorganised behavioural strategies in some situations when their attachment system is activated. 14

The distribution of T-scores obtained at each of seven scales, according to the intervals established in function of the standard deviation associated with the tool, gives another picture of the distribution of the children in the sample. Indeed, the detailed analysis of Table 3 shows the presence of difficulties related to the expression of emotions mobilised in situations that activate the attachment system. Emotions and feelings, the overall tone of which is negative (M=43; scale 3), are expressed in a direct and inappropriate manner and not through symbolic play (M=39,7; scale 4). In the same way, we observed a weak symbolic distance with regard to acts and emotions associated with attachment figures (M=39,5; scale 6). Furthermore, while the perception of

Table 3. Distribution of T-scores¹⁴ on ASCT (Phase 1, N=36)

| Intervals Scale | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | Mean score |
|--------------------------------------|-------|-------|-------|-------|-------|---------------|
| 1 Collaboration | 5* | 31** | 0 | 0 | 0 | 42,7*** |
| 2 Representation of parental support | 6 | 29 | 1 | 0 | 0 | 43,7 |
| 3 Positive narratives | 9 | 25 | 2 | 0 | 0 | 43 |
| 4 Expression of appropriate feelings | 21 | 12 | 3 | 0 | 0 | 39,7 |
| 5 Reaction to separation | 2 | 13 | 16 | 2 | 3 | 53 |
| 6 Symbolic distance | 24 | 9 | 3 | 0 | 0 | 39,5 |
| 7 Weak narrative skills | 0 | 15 | 19 | 2 | 0 | 51,7 |

^{*} Number of children having attained a score between 30 and 39 on scale 1.

Table 4. Non-resolved attachment scores with regard to birth parents (QANRA) (Phase 2)

| | Birt | h moth | er (N=19 | 9) | Bir | th fathe | r (N=11) |) |
|---------------------|--------------|---------------|---------------|-------------|--------------|---------------|---------------|-------------|
| Scale | Mean (SD) | No. ≤ Mean | No. > Mean | Min/ Max | Mean (SD) | No. ≤ Mean | No. > Mean | Min/ Max |
| Non-resolution* | 30.1 (4.5) | 10 | 9 | 23/38 | 31.9 (5.2) | 5 | 6 | 25/40 |
| Non-protection** | 10.3 (1.8) | 11 | 8 | 7/13 | 10.6 (2.5) | 5 | 6 | 7/14 |
| Anger/dysregulat*** | 8.8 (2.1) | 6 | 13 | 5/13 | 9.4 (1.6) | 1 | 10 | 7/13 |
| Fear | 11.2 (2.6) | 1 | 18 | 6/15 | 11.7 (3.1) | 1 | 10 | 5/15 |

^{*} The theoretical Mean of the index of total non-resolution is 30.

¹⁴ T-scores: standardised scores making it possible to express all of the results of the evaluation on a scale of 0 to 100 (along a normal curve) with a theoretical mean of 50 and a standard deviation equal to 10.

^{**} In bold the highest number of children per scale.

^{***} The theoretical Mean equals 50 (SD=10).

^{**} The theoretical Mean of the index of non-protection is 10.

^{***} The theoretical Mean of the index of anger/dysregulation and fear is 7.5.

parental support is based more on the presence of parental figures than on the actual emotional support provided (M=43,7; scale 2), the children tend to refuse the situation of separation, in particular as expressed by a desire to hasten reunion (M=53; scale 5).

Non-resolution of children's attachment to birth parents, phase 2

Table 4 shows the results obtained from the QANRA, eliciting the relationship to the mother and the father, during the second series of interviews.

The total non-resolution index yields a Mean comparable with the Mean in a normative population (30.1 for the mother, 31.9 for the father). However, the significant SD and the number of children with a score above the average show that there is a lack of homogeneity at this point within the sample. This element should be linked to the small number of children having completed the questionnaire.

More precisely, at the level of scales on the relationship with the mother, the majority (n=11) of children obtained a score lower than or equal to average on the scale of perceived non-protection, but 13 children felt anger and 18 expressed fear when they talked about their feelings associated with attachment to the mother.

Regarding attachment to the father, results on the perception of security clearly divided the group into two with regard to the Mean. However, on each of the last two scales, only one child obtained a score below Mean. So the presence of anger and fear is massive when the relationship with the father is concerned.

Attachment to caregiver, phase 2

Results from the IAPA are shown in Table 5. For the 22 children, the table shows the Mean, the SD, and the max/min scores for each scale. Further, the distribution of children according to the qualification of 'weak' (> 1 SD below M), 'average' (M ± 1 SD), or 'high' (> 1 SD above M) is presented with reference to the scales as defined in the tool.

The overall score of 'perceived security' is well above average for the sample as a whole. Global scores shows coherence overall in terms of perceived security. On the level of scales, 20 children perceived communications with the caregiver as good (n=20, high score), the relationship with the caregiver as based on confidence (n=21,

Table 5. Overall scores concerning the relationship of the child with caregiver (IAPA) (Phase 2, N=22)

| Scale | Mean (SD) | Min/Max | No. of weak scores | No. of average scores | No. of high scores |
|--------------------|------------|-----------|-----------------------|-----------------------|-----------------------|
| Perceived security | 3.7 (0.7)* | 1.63/4.53 | - | - | - |
| Communication | 36.0 (8.4) | 7/45 | 1 | 1 | 20 |
| Confidence | 44.1 (5.1) | 29/50 | 0 | 1 | 21 |
| Alienation | 10.2 (3.4) | 5/18 | 17 | 5 | 0 |

^{*} The theoretical Mean of the overall perceived security score is 2.5 (SD=0.5).

Table 6. Quality of children's attachment, based on relationship of the child with caregiver (IAPA) (Phase 2, N=22)

| Configuration | Configuration 1 | Configuration 2 | Configuration 3 | Configuration 4 |
|--------------------------|--------------------|-----------------|-----------------------------|-----------------------------|
| Scale | | | | |
| Communication | High | High | Low | Mean |
| Confidence | High | High | Mean | High |
| Alienation | Low | Mean | Low | Mean |
| Quality attachment (no.) | Secure (n=16) | Secure (n=4) | Secure/ ambivalent (n=1) | Secure/ ambivalent (n=1) |

high score), and without alienation (n=17, low score).

The distribution of scores obtained on the scales according to three categories (low, average, high) makes it possible to determine the type of attachment of the child to the caregiver, using 'configurations' of scales. Among all the possible configurations for cross-classification on the three scales, four are shown in this sample (Table 6).

The current attachment to the caregiver is perceived as secure for 20 children (configuration 1 and 2). Armsden and Greenberg (1987) specified that for certain children it

is relatively difficult to give a clear quality rating to perceived attachment. This is the case for two children with different configurations. Even if perception of confidence can be qualified as secure, the low score on the communication scale (for configuration 3) and the combination of average scores on the scales for communication and alienation (configuration 4) show a tendency for 'ambivalent' attachment.

Changes in children's attachment

With regard to the different technical constraints in terms of comparing data collected using different tools at different develop-

Table 7. Children's attachment at two phases of data gathering

| | | Attachment to caregiver Phase 2 | | Attachment to mother Phase 2 | | Attachment to father Phase 2 | |
|-----------------------|------------------|---------------------------------|----------------|---------------------------------|------------|---------------------------------|------------|
| | | secure | secure/ ha* | resolved | unresolved | resolved | unresolved |
| Quality of | secure | 14 | 1 | 5 | 6 | 2 | 5 |
| attachment Phase 1 | deacti- vated | 6 | 1 | 4 | 3 | 3 | 1 |
| Total | | 20 | 2 | 9 | 9 | 5 | 6 |

^{*} hyperactivated

mental ages, the cross-table below (table 7) shows the quality of attachment of certain children at phase 1 (using attachment story completion) as it interacts with the results of phase 2 specifically concerning three attachment figures: the caregiver (using IAPA), the mother and father (using QANRA).

Among the 22 children involved in the two data collection phases, 20 show a secure attachment with the caregiver in phase 2 (in phase 1, 14 were yet secure, and 6 were deactivated). Among them, six children developed an attachment to the mother that can be definied as unresolved.

Covariation

All of the contextual and individual variables collected through the general information questionnaire on the children's general situation (phase 1) and life course (phase 2) were tested as variables that could explain the quality of attachment of the child. Only two proved to be significant: the age of the child at the time (s)he was placed in foster care and change of the foster family.

The highest mean ranks obtained using the QANRA on the mother-child relationship (which is unfavourable) concerned the group that was aged over 32 months at placement (n=6). The significance of the Kruskal-Wallis test enables us to confirm the difference between the groups of children according to their age at placement with regard to non-resolved attachment (χ^2 =10.076, p=.006, N=19, df=2), and the presence of anger (χ^2 =8.363, p=.015, N=19, df=2) and fear (χ^2 =6.034, p=.049, N=19, df=2) in the relationship with the mother. Furthermore, the six children who had experienced a change of foster family make

up a group whose mean scores and ranks obtained with IAPA are the lowest for overall perceived security (χ^2 =4.429, p=.035, N=11, df=1) and communication (χ^2 =5.084, p=.024, N=11, df=1) in the relationship with the caregiver.

Discussion

The children encountered in this research. being in foster care for more than six years, mostly had attachment levels qualified as secure (70% at phase 1; 91% at phase 2). These results are close to those found in research by Jacobsen and colleagues (2014). Meanwhile, depending on the child's age, the length of time in care, and the methods applied, the percentage of perceived security observed in our study is much higher, whether compared to studies involving children under the age of 30 months (46%) (Bernier & Dozier, 2003) or adolescents (47%) (Howes, 1990). We commend, however, that the stability and scope of attachment representations observed in the first phase of interviews should be nuanced by the fact that the children also had recourse to disorganised attachment strategies in certain situations, despite the preponderant reliance on secure strategies.

The measurement of the evolution of the quality of attachment is not easy from a methodological point of view because of the developmental age of the child, the modification of the manifestation of this process, and the limited number of tools available (validated in France) for use with children under child protective services. Thus, the choice of tools has considerable impact on the analyses that can be carried out. During the first phase of data collection for this study, young

children's attachment representations were observed, without differentiation regarding attachment figures. The methodology used during phase 2 data collection included measurements that differentiate between different attachment figures.

After more than six years of separation from their parents following the intervention of child protection services, the children in our sample appeared to have quite some negative emotions that seemed to impede a resolution or at least a calming of the attachment relationship with the mother. And this was also the case - but even more pronounced - with regard to the father. To a lesser extent, the pervasiveness of non-secure attachment to parents was also demonstrated by Ouellette and colleagues (Ouellette, Charbonneau, Palacio-Quintin, & Jourdan-Ionescu, 2001): long-term care did not enable children to be soothed with regard to their emotional relationship with their parents nor to reconsider their experiences and memories of the relationships. These findings should be considered in light of the child's experiences with his/her parents before the separation in the context of child protection.

In addition, our research, like earlier work (Rutter, O'Connor & ERA, 2004; Stovall & Dozier, 2000), showed that the children who are older when placed are more likely to develop non-resolved attachment to their mother, with a high level of fear and anger. This result can be linked to the fact that the child was at a key age of development with regard to internal operating models of attachment when separation took place. Besides it might be relevant that these children are also those who have been in care the shortest length of time. Moreover we know that in children, aged about ten years old, the tenor and manifestation of an attach-

ment relationship are changing throughout pre-adolescence, and chiefly linked to communication with and deep knowledge of the other (Dykas & Cassidy, 2007). The foster care situation creates both physical and psychological distance from the birth parents, and is thus unfavourable to the development of the relationship.

At the same time, attachment to the foster carers was qualified as secure for all of the children in the sample (attachment based on communication, confidence and the relative freedom to think and feel), except for two children who showed a tendency to hyperactivation of their system. This confirms the hypothesis that a child can find emotional security in a new relationship within the foster family. This would mean that the relationship with the caregiver offers the child enough emotional security so that the insecurity present in the parental relationship does not have too great an impact on the child's overall development, nor does it prevent the development of new emotional relationships. The demonstration of the co-existence of at least two types of attachment, with opposing qualities, supports the hypothesis of the constitution of more than one internal working model. It therefore appears that these children are not inevitably saddled with insecurity in all of their attachment systems, nor are they unable to establish a secure relationship in the future. Yet, this does not enable us to postulate that acquired security in a relationship will be maintained throughout the changes to come as the children progress on their life course. Even if the caregiver provides a secure base, contextual factors associated with the ways in which foster care is supported should be considered.

One other result emerging from this study concerns the impact of changing the

foster home on the quality of attachment of children in placement. It seems clear that continuous care in the same foster family promotes emotional security and the capacity to develop new relationships, based on communication with the caregiver. The pernicious consequences of changing foster homes on the development of the child were once again confirmed (Eagle, 1994; Marcus, 1991; Stovall & Dozier, 1998).

Limitations

The methodology used in this research runs up against limits that must be taken into account in order to understand the scope of the results. The small sample of children encountered, non-representative of the population of children in care in France, leads us to warn against overgeneralisation of our findings. Continued research with a more extensive sample can be recommended here.

Furthermore, the longitudinal measurement involved the change in a process examined with different tools. So the characteristics of children's attachment as measured at the two times mentioned, were not identical. Replication of the study using the same instruments would therefore be wished for.

Finally, our study did not consider the potential effects of interventions, for instance by social workers, carried out for the benefit of children and/or caregivers. In a further study the potential impact of this kind of professional support should be acknowledged and included in the research design (Hambrick, Oppenheim-Weller, N'Zi, & Toussig, 2016; Mountain, Cahill, & Thorpe, 2017).

Implications

It is known that emotional security for a child in care is related to the characteristics of the caregiver in terms of his/her sensitivity and emotional stability (Ackerman & Dozier, 2005). This should be kept in mind during the matching of children and foster carers (Zeijlmans, López, Grietens, & Knorth, 2017). In addition, support for the parental role of the birth parents of children in care is recognised as a field for improvement in France; such support might help a child in (partly) re-working early emotional relationships.

In France, child placement is considered a temporary measure, always for a limited time. However, our research indicates that the return of children to their birth families is less likely in the event of a legal order regarding very young children. So children, while keeping in touch with their birth parents, may grow up for many years in a foster home and develop secure attachments there. It should encourage those in the social work sector to do their best to avoid and prevent interruptions in the life course of the child under protection.

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