# Attachment representations of adolescents in institutional care

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## Abstract

In this study, the attachment representations of adolescents living in residential care are explored. The adult attachment interview (AAI) was carried out with 72 young persons. At the same time the degree of adolescent psychopathology was recorded. For this purpose the caregivers were investigated with a parents' questionnaire on behaviour of children and adolescents (Child Behavior Checklist: CBCL) and the adolescents themselves with a questionnaire for young people (Youth Self Report: YSR). As expected, the young persons in this sample proved to be severely burdened in psychopathological terms. There was virtually no secure attachment representation with an extensive overrepresentation of the cannot classify category. The implications of these findings for the practice of residential care inspired by attachment theory are discussed.

**Key words: adolescents, residential care, attachment representation, "cannot classify" category**

## Introduction

John Bowlby founded attachment theory in the context of institutional care. In his study entitled "Forty-four juvenile thieves: their characters and home life" of 1944, he investigated the early domestic circumstances and parent-child relationships of 44 thieving children, who had been placed in a Child Guidance Center. The reports of the social workers showed that in almost every case there had been abnormal home conditions involving emotional abuse and violence. One group of children, in particular, who had been separated from their mothers for long periods after having been able to build up an emotional relationship with them, showed behavioural problems that Bowlby called "affectionless psychopathy". These children were hardly able to establish long-term relationships and showed few signs of guilt for their social misdeeds. In his monograph, entitled "Maternal care and mental health" (1951), which he wrote under commission from the WHO, he was explicitly concerned with "children who are orphaned or separated from their families for other reasons and need care in foster homes, institutions or other types of group care".

It is especially due to Mary Ainsworth that the originally very global and hardly operational concept of maternal deprivation was made specific in the new concept of attachment. Originally the psychological damage suffered by these children was explained with just such a lack of maternal affection, even though Bowlby never saw separation from the mother as the sole pathogeny but from an early stage also considered the possibility of associated genetic causes

and, in addition, took into account a possible partial responsibility of the child for the disturbance to the mother-child relationship, in which he anticipated the modern transactional point of view (Bowlby, 1940; 1953). Later, it became apparent that it was not so much the absence as the poor quality of the parent-child relationship that represented the pathogenic factor.

This work carried out in the first phase of attachment research which was concerned with the catastrophic results of early separation from the mother in particular for infants entrusted to pedagogical institutions and which must therefore be understood as a series of contributions to a fundamental criticism of institutional care in general led to improvements in the practice of institutional care. Nevertheless from now on it was asserted that institutional care was damaging to children and could be viewed only as a possibility of last resort, when other, less invasive forms of out-of-home placements, such as foster families, failed.

This is the reason why at least in the countries of the European Community the numbers of residential provisions and children accommodated in residential care are decreasing (Colton & Hellinckx, 1999), in contrast to the numbers of children placed in foster care. It is believed that residential care is nowadays reserved for young people whose behaviour is becoming more challenging. This seems to be true particularly for adolescents with emotional and behavioural difficulties who tend to remain in residence for longer periods (Gooch, 1999).

In the following the results of an explorative data analysis of the distribution of attachment representations among adolescents living in a residential institute will be presented. To make it possible to assess them properly, they are to be prefaced with a few comments on institutional care in Germany, since accommodating children and adolescents in institutional homes is no doubt subject to powerful cultural considerations.

## Institutional care in Germany

The care systems in Germany are characterized by a double track approach insofar as both the health services and the youth welfare system are involved in the care of problematic children. Although this approach opens up a wide spectrum of different help options it also requires a high degree of co-operation because of a considerable overlap in responsibility and problem definition (Höger & Rothenberger, 1998). In Germany, as elsewhere, the practice of institutional care has changed considerably since the days of Bowlby and Spitz. However, the influence of early attachment research can be seen only indirectly to the extent that criticism based on attachment theory probably prepared the ground for the fundamental institutional reform that has taken place since the end of the 1960s. The changes relating to the so-called "Homes Campaign" were a consequence of the student movement of 1968/69, and were therefore motivated primarily by political thought rather than, for example, by the dissatisfaction of experts with poor conditions in the homes. Meanwhile the residential homes have lost almost all of their earlier rigid institutional character. They are no longer "total institutions". In fact there is no longer any such thing as "the home". Rather, the concept of institutional care can now be understood merely as a collective category for a wide variety of care settings. The present practice of institutional care in Germany can be described with the programmatic terms decentralization, de-institutionalization, de-specialization, regionalization, professionalization and individualization (Wolf, 1995).

In contrast to other European countries, however, in Germany foster families are not preferred, in spite of definite programs of this kind for accommodating children outside their family. As a result the number of admissions to residential homes is even rising in comparison

to other European countries. In the years 1991 to 1995 the number of youngsters living in residential establishments changed from 64.000 to 70.000 (Dempwolf, 1998).

After the improvements of care provisions particularly due to their increasing differentiation, institutional care is now only indicated for children and adolescents whose parents are clearly no longer in a position to bring up their children themselves. Even though, therefore, it is usually not the problems of the children and young people themselves that underlie permanent residential care, but the psychic overburdening of the parents and confused or chaotic intrafamily relationships, one has to assume that the parents' inability and/or unwillingness to exercise their responsibilities will lead to behaviourally disturbed children who are difficult to educate.

For example, according to a recent representational evaluation study of residential outcome in Germany (Baur et al., 1998) the reasons underlying admission to residential care include sharp conflicts between parents and children (67%) and a history of maltreatment (43%). These children were burdened by a cluster of familial stresses, such as poverty status (40%), problematic living accommodations (31%), unemployment (23%), debts (21%), massive violence in the family (43%), parents' addiction problems (35%), and problematic partner relationships between parents (53%). Most of the parents (70%) were facing demands they were unable to meet.

The goals of the present study are the following:

1. To assess psychopathology among adolescents living in residential care. Regarding the multiple risk factors there should be a high presence of psychiatric symptoms.
2. To identify their attachment mental representations, using the Adult Attachment Interview. Regarding the background of family breakdown and the lack of a consistent secure base during their early childhood years it is expected that these adolescents should rely only on highly insecure attachment representations.
3. To speculate upon the implications of the attachment concepts found for the pedagogical relationship between staff-members and the pupils.

# Method

## *Participants*

The study was carried out in a home for children and adolescents under church sponsorship with a total capacity of 132 residential and 30 partly residential places. As far as possible, the study was to include all young persons over the age of 12 years who were living in the home in the course of a year. Altogether 72 adolescents agreed to take part in the study. Ten adolescents refused to participate on the grounds that they did not want to talk about their family backgrounds. The age of the 39 boys and 33 girls varied from 12 to 23 years, the average age being 16 years and 8 months. Fifty-nine of the young persons were of German origin, 12 of non-German. When the participants had been admitted to this home they were 12½ years old on the average. The average length of their stay there was 4 years and 3 months.

In line with the modern educational concept of the home, which covered a large number of differentiated educational provisions, many of the adolescents taking part in the study did not live in traditional group facilities staffed by professional staff working shift schedules. Fourteen adolescents lived in a group focused on gaining independence, which was localized

outside the main building. Seventeen were living in their own small apartment under the supervision of pedagogical mentors.

Information about the biographies was derived from the official records. Sixty of the young people had been mistreated and/or neglected in their original families before entering the home. In the case of 24 adolescents, this is one third of the group studied, it had to be assumed that their parents had an alcohol problem. Four of the adolescents had been driven from their home country by war. In the case of three quarters of the adolescents their parents no longer lived together. Fourteen of them had experienced the loss of a parent or of some other important person they related to from death. Information provided by the young people and also by the workers in the home suggested that most of their families were disadvantaged in socio-economic terms. In general the sample studied is probably a typical group of adolescents placed in residential treatment, at least in Germany. With due care and precautions, therefore, it should be possible to transfer the results onto groups of adolescents treated at a residential facility in general.

## *Procedures and measures*

### Adult Attachment Interview

The Adult Attachment Interview (AAI) was administered to 72 adolescents. The AAI is a semi-structured narrative interview the aim of which is to assess the current attachment representations of both adolescents and adults in a valid and reliable manner (Van IJzendoorn, 1995; Hesse, 1999).

These representations are an organized complex of contents of memory partly stored unconsciously in the procedural memory and partly accessible to consciousness in the episodic memory. These memories relate to matters relevant to attachment such as the interaction with important attachment figures in cases of illness, injury, worry, rejection, separation or their loss. In order to record the unconscious part of the attachment representations, the analysis does not primarily target the contents of the interviews but rather the manner in which the interviewee tells the story. To evaluate this coherence-of-transcript, a scale is used to assess to what extent the interviewed person succeeds in maintaining the rules of ideal conversation formulated by the linguistic philosopher Grice (1975).

In numerous studies, the AAI has proven to be largely independent of influences that can be traced back to the interviewer and also of such characteristics of the participants as intelligence or general cognitive skills (Bakermans-Kranenburg & Van IJzendoorn, 1993).

An attachment representation which grants a fundamentally high value to the attachment relationship is assessed as "secure-autonomous" or "free to evaluate" (F). The answers are comprehensible, the expressed feelings credible. The listener or reader gets the impression that the person being interviewed has managed in the meantime to look back on attachment-relevant experiences from childhood from a certain distance. The internal working model is called "insecure-dismissing" (Ds) if the responses in the AAI, which are usually short and curt, reflect either a tendency to an emotional somewhat uninterested devaluation or, at the other extreme, an unconvincing over-idealization. An attachment representation of persons whose responses suggest that there is still a conflict-laden relationship to the former attachment figures is described as "insecure-preoccupied" (E). The interviews were judged "cannot classify" (CC; Hesse, 1996) when the presence of both dismissing and also preoccupied parts in the transcript did not permit an unambiguous classification of a predominant state of mind with respect to attachment and when the minimal score of 1 was assigned on the 9-point coherence-of-transcript scale. This four-way division of the attachment models has been supple-

mented with the class of "insecure-unresolved" attachment representations (U/d), which was assigned when the interview showed signs of unmastered psychic traumata or the loss of an attachment figure. The Unresolved status was used if score of 5.5 or higher was assigned on the 9-point lack-of-resolution-of-mourning scale regarding past loss or trauma. Whereas this U/d-status relates to an only local breakdown in the discourse on loss or other trauma, the former CC-category refers to a global breakdown of coherent discourse about attachment experiences (Hesse, 1996).

The interviews, which each took between one and two hours, were recorded on a tape recorder and then written down word-for-word for analysis. The AAIs were classified by the interviewer herself and then by a second qualified rater. Susanne Müller and Inge Graf-Mannebach, both trained by David Pederson at an AAI-Training Seminar in Toronto, Canada, and certified by Mary Main, coded all the transcripts according to the guidelines of Main and Goldwyn (1998) after reaching an inter-rater reliability of 80% (kappa = .68). In cases of disagreement the final classification was performed in a joint discussion. Even though a certain distortion cannot be excluded when using this procedure, however unlikely it may be (Sagi et al., 1994), the advantages must be seen to be greater, since with this clientele, who have difficult behaviour patterns and are often quite mistrustful, it is not possible to assume that there is an unconditional willingness to cooperate in a scientific investigation. For this reason it seemed important to establish a relationship of trust between interviewer and interviewee in the months before the interview was actually conducted.

### Child Behavior Checklist

The assessment of adolescent psychopathology was performed using the Child Behavior Checklist (CBCL; Achenbach 1991a) in the German translation of the "Arbeitsgruppe Deutsche Child Behavior Checklist" (1998a, b). The CBCL is used very frequently in international epidemiological research for assessing the behavioural problems of children and adolescents, at least to make a general distinction between psychiatrically problematic and unproblematic behaviour in children and adolescents. Standard values have also been established for Germany (Döpfner et al., 1997).

Since the questionnaires were administered to the caregivers, in the present study the CBCL, which was originally designed for parents, records adolescent psychopathology from the point of view of their caregivers on the assumption that they experience the adolescents in their everyday "domestic" environment. On the basis of the eight first-order syndrome scales (primary scales) three second-order problem scales (secondary scales) were formed by factor analysis. The secondary scale named "Internalizing" covers the syndrome scales Anxious/Depressed, Somatic complaints, and Withdrawn, the secondary scale named "Externalizing" covers aggressive and delinquent behaviour. In addition a total score for problems was formed, which includes almost all items. The evaluation of the scale raw-number sums results in a profile which uses percentage rankings and T values to provide the relative position of the child being studied in relation to the standardization sample. The test quality criteria are generally satisfactory. Recording a representative sample made German standardization values possible. Accordingly, one may speak of clinically relevant problems above a percentage ranking of 95 on the primary scales or a percentage ranking of 82 on the secondary scales (Arbeitsgruppe Deutsche Child Behavior Checklist, 1998a, b).

### Youth Self Report

The adolescents themselves were questioned with the questionnaire for adolescents, the German translation of the Youth Self Report (YSR; Achenbach, 1991b), which is structured in analogy to the parents' questionnaire, CBCL, and whose scaling and evaluation are made according to the same principles as the parents' questionnaire (Arbeitsgruppe Deutsche Child Behavior Checklist, 1998a, b).

# Results

## *Adolescents' attachment representations*

Classification of the attachment representations (Table 1) yielded practically no secure classification. Only in the case of three out of the total of 72 adolescents was the AAI classified as secure-autonomous (F). There is a clear gender difference ($Chi^2$ = 36,11, df = 3, $p < .001$). Boys were classified significantly more frequently as insecure-dismissing (Ds). Girls were more frequently classified in the category cannot-classify (CC).

**Table 1**
Distribution of attachment classification in the residential care sample (N = 72) by gender

| | Attachment Classification | | | |
|---|---|---|---|---|
| | F | Ds | E | CC |
| Males (n = 39) | 1 (2,6%) | 22 (56,4%) | 2 (5,1%) | 14 (35,9%) |
| Females (n = 33) | 2 (6,1%) | 6 (18,2%) | 6 (18,2%) | 19 (57,6%) |
| Total (n = 72) | 3 (4,2%) | 28 (38,9%) | 8 (11,1%) | 33 (45,8%) |

F autonomous/secure; Ds = Dismissing; E = insecure/preoccupied; CC = Cannot-classify

## *The cannot-classify subgroup*

Thirty-three of the adolescents studied could not be classified as secure, dismissing or preoccupied because in their interviews there was a mixture of contradictory mental states such that no predominant strategy was to be identified. In 11 of these 33 cannot classify interviews a best-fitting dismissing subcategory was assigned, whereas in 22 cases two or three dismissing and preoccupied sub-categories, which normally will be contradictory, seemed applicable. High scores for idealization and for insistence upon lack of memory correspond with a very low score for coherence of mind.

Table 2 provides a comparison between the CC group and the remaining subjects whose attachment representation was judged organized on the AAI state of mind scores "idealization", "anger", and "derogation" for each parent. The two groups were significantly differing on "idealization of the mother", "anger expressed towards the mother", "anger expressed towards the father", and "derogation of mother", but not on "idealization of the father" and "derogation of the father".

The CC adolescents differed from the other adolescents in a number of ways (Table 3). They were somewhat older. CC subjects had been taken from their family at a younger age. Consequently they had been living in residential care for a notably longer time ($F$ = 10,77, df = 70, $p < .03$). Among them more often sexual abuse was certain or at least probable ($Chi^2$ = 8,00, n = 24, df = 1, $p < .01$).

**Table 2**
Comparison of CC with other sub-groups regarding the AAI state of mind scores

| | CC | | | Non-CC | | | T | p |
|---|---|---|---|---|---|---|---|---|
| | N | Mean | SD | N | Mean | SD | | |
| Idealizing (mother) | 33 | 4,09 | 2,60 | 37 | 5,39 | 2,66 | 2,07 | .04 |
| Idealizing (father) | 30 | 3,98 | 2,64 | 37 | 4,19 | 2,74 | 0,31 | .76 |
| Anger (mother) | 33 | 3,47 | 2,21 | 38 | 2,28 | 2,07 | -2,34 | .02 |
| Anger (father) | 31 | 3,10 | 2,06 | 37 | 2,07 | 1,92 | -2,12 | .04 |
| Derogation (mother) | 33 | 2,05 | 1,65 | 38 | 1,32 | 1,07 | -2,18 | .03 |
| Derogation (father) | 31 | 2,00 | 1,95 | 37 | 1,41 | 1,25 | -1,45 | .15 |

In regard to the state of mind scores the transcripts are coded on nine-point scales ranging from 1 (no expression) to 9 (very strong expression).

**Table 3**
Comparison of CC with other sub-groups

| | Attachment classification | |
|---|---|---|
| | CC (N = 33) | other (N = 39) |
| Average age (years) | 17,3 | 16,4 |
| Age (years) at first separation from attachment figure | 8,9 | 10,4 |
| Term of stay in residential care (years) | 6,2 | 3,8* |
| Sexual abuse certain or probable (n = 24) | 15 | 9* |

* $p < 0.01$. Because of the explorative character of the study no Bonferroni correction was used despite the multitude of computations

## *Comparison with other studies*

Table 4 enables comparison between the AAI distribution on this study sample and the distribution of other samples of adolescent or forensic groups. The unresolved (U) and cannot-classify (CC) categories have been merged for the purpose of comparability with these other datasets from the literature. It shows that the distribution found here is very different both from that of clinically unproblematic adolescents ($Chi^2 = 41{,}36$, df = 3, n = 297, $p < .001$) and from that among pregnant adolescents as well ($Chi^2 = 45{,}21$, df = 3, n = 160, $p < .001$). In the latter group there was a socio-economic disadvantage. In addition, their relationship to their parents was weak. The pregnancies had not been planned. However, they were not living in a home and insofar would have been less problematic in behaviour. There is also a strong distinction ($Chi^2 = 45{,}95$, n = 131, df = 3, $p < .001$) with respect to the distribution of attachment representations among adolescents admitted to a psychiatric hospital, studied by Rosenstein and Horowitz (1996). Only one of 59 adolescents was assigned to the category of secure attachment representations. Thirty-nine percent of them alone had an insecure-preoccupied attachment representation (E). However, in this study the attachment category "CC" was not yet in use. The clinical sample of adolescents from psychiatric residential units studied by Wallis & Steele (2001) revealed also very low levels of security ($Chi^2 = 77, 51$, n =

111, df = 3, $p < .001$). Only 4 of the 39 young patients (= 10%) were classified secure-autonomous, 20 (= 51%) dismissing, 11 (28%) preoccupied, and 4 (10%) were judged cannot classify. Twenty-three participants (59%) were additionally judged unresolved with respect to experiences of trauma or loss.

**Table 4**
Distribution of AAI classifications: Comparison with other studies

| Study | n | Attachment classification | | | |
|---|---|---|---|---|---|
| | | F | Ds | E | U/CC |
| Present study | 72 | 2 (3%) | 26 (36%) | 5 (6%) | 39 (54%) |
| Normal adolescents (1) | 225 | 107 (48%) | 47 (21%) | 27 (12%) | 44 (20%) |
| Pregnant adolescents (2) | 88 | 28 (32%) | 32 (36%) | 5 (6%) | 23 (26%) |
| Psychiatrically hospitalized adolescents (3) | 59 | 1 (2%) | 23 (39%) | 23 (39%) | 12 (20%) |
| Psychiatrically hospitalized adolescents (4) | 39 | 3 (8%) | 8 (21%) | 4 (10%) | 24 (62%) |
| Forensic male adults (5) | 40 | 2 (5%) | 9 (22%) | 8 (20%) | 21 (53%) |
| Forensic female adults (6) | 33 | 6 (18%) | 6 (18%) | 3 (9%) | 18 (55%) |

(1) Van IJzendoorn & Bakermans-Kranenburg (1996)
(2) Ward & Carlson (1995)
(3) Rosenstein & Horowitz (1996)
(4) Wallis & Steele (2001)
(5) Van IJzendoorn et al. (1997)
(6) Lamott & Pfäfflin (2001)

A similar distribution of attachment representations particularly with regard to the U/CC category was found only in two studies, both of which used a forensic sample. In the study carried out by Van IJzendoorn et al. (1997) on adult males with serious personality disorders, who were under treatment in a psychiatric institution because of serious crimes ($Chi^2$ = 66,93, n = 112, df = 3, $p < .001$), it was discovered that more than half of these personality disordered criminals, in fact 55%, had grown up in a home. Separation from attachment figures in childhood was related to later insecure attachment as well as to personality disorders. Lamott and Pfäfflin (2001) used the AAI to study attachment representations of women sentenced for crimes involving killing ($Chi^2$ = 62,57, n = 105, df = 3, $p < .001$). They found a clear distinction between the distribution of attachment representations among women who were detained in federal prisons and women who were treated in high security psychiatric units because of their psychiatric disorders. Of the 14 women with psychiatric disorders only one was classified as secure-autonomous (F), four (29%) as dismissing (Ds), two (14%) as preoccupied (E) and two (14%) as unresolved (U/d). Five of the test persons in disciplinary detention (36%) were classified as CC, for which the authors suggested the term "fragmented".

## *Resolution of loss and/or trauma*

In 59 interviews experiences of loss through death or abusive experiences were discussed. In 16 cases there was no evidence of disorganization or disorientation on discussions of these experiences, in 29 cases there was only slight or at least not definite evidence. Fourteen participants were judged unresolved insofar as they scored 5.5 or higher on the lack-of-resolu-

tion-of-mourning scale regarding past loss or trauma. Of these 14 unresolved interviews, eight were alternatively classified as cannot classify, three as preoccupied, two as dismissing, and only one as secure-autonomous.

## *Psychopathology*

According to the results from the CBCL questionnaire and the YSR questionnaire, these adolescents are a group with a high degree of psychopathological features. Table 5 shows the frequency rates at which the adolescents exceed the percentage thresholds of 95 on the primary scales and 82 on the secondary scales, which can therefore be judged as clinically significant in this regard. They were assessed as problematic by their caregivers almost as often as by themselves.

**Table 5**
Frequency of clinical problems (percentages) on the YSR and the CBCL (N = 72)

| | YSR | CBCL |
|---|---|---|
| First order scales | | |
| Withdrawn | 24 | 28 |
| Somatic complaints | 18 | 9 |
| Anxious/Depressed | 19 | 27 |
| Social problems | 15 | 28 |
| Thought problems | 15 | 19 |
| Attention problems | 16 | 28 |
| Delinquent problems | 21 | 28 |
| Aggressive behavior | 13 | 25 |
| Second order scales | | |
| Internalizing | 47 | 52 |
| Externalizing | 46 | 46 |
| Total problems | 53 | 51 |

The value of the total problem behaviour score was three times as high as in the representative German sample. Even on the first- and the second-order scales higher scores were found. Depending on the area of behaviour, these scores were categorized as "clinically problematic" three to five times more often as in the representative German sample. With regard to the total number of problems, 60% of those adolescents who had been classified as "problematic" by their caregivers also classified themselves as "clinically problematic". This well-known discrepancy between other and self-reports is probably due to the discrepancy in the information base used by the informants, since problematic behavioural features depend on situation and context (Döpfner & Lehmkuhl, 1997).

Girls classified themselves as more problematic than boys on the Somatic Complaints ($U$ (67) = -3.26, $p < .005$), the Anxious/Depression ($T$ (65) = -2.31, $p < .05$), and the Internalizing Problems scale ($T$ (65) = -2.98, $p < .005$). Boys, on the other hand, classified themselves on none of the scales as significantly more problematic than girls. Although the gender differ-

ences in the symptom areas Somatic Complaints and Anxious/Depression corresponded with those found in the representative German study (Döpfner et al., 1997), in the present study, contrary to expectations, boys did not classify themselves as more problematic on the scales measuring unsocial and aggressive behaviour. On the CBCL, no clear gender difference was found on the unsocial and aggressive behaviour scales. Only on the Anxious/Depression scale a statistically significant gender difference was found (U (66) = -2.84, $p < .005$). Here, as on the Internalizing problems scale, girls scored higher than did boys ($T$ (64) = -1.89, $p < .10$).

### *Relationship between psychopathology and attachment representations*

Considering the high basic rates of psychopathological problems and attachment insecurity, for statistical reasons alone unambiguous relationships between these features are hardly to be expected (Table 5). Even if the quantity of symptoms among the adolescents with an unorganized-insecure (Ud/CC) attachment representation was generally higher than in the case of those with an organized-insecure (Ds/E) attachment representation, the differences do not reach statistical significance.

## Discussion

### *Insecure attachments and psychopathology*

As expected, the results suggest that the adolescents in residential care differ clearly from normal adolescents. In the first place, they are strongly burdened with psychopathological features. This applies to the girls in a special way. The girls living in the residential home show a high presence of both internal and external symptoms, with high comorbidity between symptoms. This result is notable, since no significant gender differences with regard to antisocial and aggressive behaviour were found, neither in the self-reports nor in the other reports. Secondly, these young people, almost without exception, have access only to an insecure attachment representation. In the distribution of attachment representation patterns they make an impressive contrast to adolescents in the normal population, who hardly differ from adults in this respect (Van IJzendoorn & Bakermans-Kranenburg, 1996).

In the present study, statistically comprehensible associations represent only a momentary situation so that the question of causal connections must remain unanswered. Nevertheless, they should be discussed against the background of the insights gained from longitudinal studies. Even if there is still no full agreement about continuity in the attachment organization between infancy and that of adolescence or adulthood (Weinfield et al., 2000) it can be assumed with knowledge of the lives of the adolescents studied here, characterized by abuse and maltreatment, that they have probably never had access to a secure attachment organization at any time of their lives. On the contrary, there are correspondences with the development of children of mothers from low socioeconomic status, as explored by Carlson (1998) in a prospective longitudinal study from babyhood to adolescence. In this study, relationships were found between an unorganized/disoriented attachment in infancy and behavioural problems in kindergarten. Further, attachment problems in infancy predicted both internalizing and externalizing problems in childhood and adolescence, in particular, dissociative symptoms in the ages between 11 and 17 years.

## *The significance of highly insecure attachment representations*

The greatest difference between the group of adolescents in residential care and the other groups of adolescents studied until now is the high proportion in the CC attachment category, where contradictory patterns in the AAI are characteristic. In non-clinical samples this category is distinctly unusual. It has been found to such a high degree only among adults in connection with psychiatric conditions, violence and criminality (Hesse, 1999). The significance of this attachment category at an adolescent age has not yet been explained. For the adolescents studied here it may well be assumed that the precarious life experiences they had in their original families, marked by neglect, maltreatment and sexual abuse, sharp conflicts between their attachment figures, and the frequent change of such figures, did not permit integration along the lines of a consistent attachment strategy. As a consequence it was not possible to construct a coherent attachment organization. Multiple attachment disruptions which may be seen as a marker or summary variable for cumulative risk factors (Kobak et al., 2001) were the normal state of things in their life. For that reason such traumatic experiences have quite often caused a global breakdown in attachment strategies.

Perhaps, however, a more optimistic view is also possible, according to which the high prevalence of CC attachment patterns can be explained by the fact that these adolescents have not yet succeeded in integrating new and better attachment experiences into their internal working models. In that case the CC classification would rather be a sign of hope. It suggests itself, however, that the specific residential context with its large number of relationships associated with shift work – which relationships are therefore almost never exclusive – makes the task of such a development even harder. The present findings provide, finally, no indications that could suggest that the youth welfare measure of residential care could have improved the degree of organization in the youth's attachment representation, in the sense of a corrective attachment experience (e.g. Schleiffer, 2003). The statistically demonstrable connection between the term of the stay in the residential home and an especially insecure attachment representation does not suggest that such an intervention is efficient.

Even if the frightening similarity between the attachment distribution of the adolescents and that of criminals with psychiatric problems may by no means lead to the conclusion that the adolescents now in residential care will probably become criminals with psychiatric problems themselves, this result must nevertheless suggest that further research is necessary. According to the probabilistic developmental psychopathological approach the factors have to be studied that determine who becomes psychically disturbed and/or criminal.

For the time being one may only be sceptical about the future development of the adolescents, especially considering that the Adult Attachment Interview definitely has a predictive validity for psychopathological conditions (Van IJzendoorn, 1995). This can be no reason for surprise since we know of the relationships between the current attachment representation of adolescents and a series of adjustment variables in this age-group, for example ways of coping with stress, the development of self-esteem or the form of relationships not only to parents but especially to peers – people of the same age – and therefore to future partners (Allen & Land, 1999). Consequently an insecure, and especially a highly insecure attachment representation even in adolescence must be viewed as a by no means negligible potential risk factor for the person's future life.

## *Consequences for educational work in residential treatment*

According to the law, residential care is a measure of the youth welfare system whose purpose is "to support the development of children and adolescents by means of an association of ev-

eryday life with educational and therapeutic provisions" (Section 34 of the KJHG), thus contributing to the young person's ability to realize his or her "right to support in his or her development and to an upbringing into a personality capable of bearing responsibility and living in a community" (Section 1, Subsection 3, KJHG). Consequently, residential care should not only be concerned with ameliorating the psychopathological problems, but also with improving attachment representations.

The latter goal can be pursued only if the adolescents in the residential home receive an opportunity for experiences that are incompatible with their internal working models and therefore stimulate change. Ultimately internal working models of attachment are likely to change only if they are "corrected" by attachment experiences. Insofar the assumption seems plausible that such "correcting" experiences will take place by encounters with staff members who function as attachment figures. Therefore caregivers in a residential home should be available as attachment figures. However, such a prescription may be seen as too optimistic because the development of attachment relationships to residential staff is anything but self-evident. As Schuengel and Van IJzendoorn (2001) in their thorough discussion of the attachment in mental health institutions put it one should be "cautious in predicting that taking adolescents or adults from their families and treating them in an institution will always lead to searching for alternative attachment figures within that institution, even if caregivers try to foster attachment by offering secure base support". Nevertheless the assumption that child-staff relationships are important in determining the progress of residential youth (Moses, 2000) are well substantiated. For example, in the Gehres' study (1997) of former residential youths the subjects believed that their development was mostly influenced by the relationships with the staff. In a similar way Wieland et al. (1992) found that former residential youths gave a positive judgement about their residential experiences if their relationships with the staff was exclusive and therefore relevant with regard to attachment.

Because of their natural tendency to form attachment relationships adolescents in residential treatment facilities should express a serious need for close personal relationships with adults (Jaffe, 1967). This does not mean that an attachment relationship will develop automatically. As Schuengel and Van IJzendoorn (2001) stress "using a staff member as a secure base, being involved in an (insecure or secure) attachment relationship with a staff member, and feeling attached to a particular staff member need to be distinguished". The development of an attachment bond (Cassidy, 1999) takes time. Most adolescents investigated in this study were living in this residential home for many years. The residential home was definitely their centre of life. The relationships between youngsters and their parents were in most cases rather weak. Therefore they had to direct their attachment behaviour to the members of staff.

However, the youths' respective attachment representations determined their attachment and their willingness to form subsidiary attachment bonds. These innermost models decide to what extent the young people are at all willing to venture into correcting their attachment representations. They must at least have acquired a minimum of trust in attachment if they are to profit from the educational aids provided for them in this regard. This is the basis of the well-known paradox that those who "objectively" have the greatest need of assistance are psychically least able to make use of the assistance provided.

Attachment theory is in a position to cast light on a large number of problems that arise when this difficult clientele in a residential home is being dealt with. For example, an attitude of the adolescents that devalues attachment will easily frustrate the caregivers because their offer of a helpful relationship is often brusquely rejected. There is then a risk that the caregivers will draw back from the young people as a matter of self-protection and to this extent participate in their devaluing attitude to attachment. In this way, however, their internal working model of attachment devaluation is again confirmed and consolidated, especially since attachment-

devaluing attitudes are favored by the sub-culture in this age-group. Furthermore, the caregivers' collusion in the avoidance of attachment can easily be rationalized by referring to the need to encourage these young people to be independent. This, however, ignores the fact that the need for attachment exists throughout life, "from the cradle to the grave" (Bowlby, 1979, 129), and is certainly intensified in persons whose attachment needs have been satisfied so little as is the case with young people in a residential home.

Preoccupied or entangled insecure attachment manoeuvres on the part of the adolescents can also be a considerable burden on the educational relationship. Without sufficient trust, they regulate distance without consideration for the sensitivities of the other person. Such a relationship is characterized by powerful but ambivalent feelings, frequently on both sides. But the more the caregiver feels the need to be rid of the young person, the more the latter emphasizes his or her helplessness, thus forcing care to be provided, though unwillingly. Contrary to the dismissing mode affectionate and thus easily observable behaviour demonstrate that the caregivers have some relevance for the youths. This experience may foster the staff members' self-esteem. They may feel confirmed in their role of professional caregivers. Because of this narcissistic gratification they were able to stand even bad treatment by their clientele. Sometimes they seemed to be quite exploitable in this respect.

The educational relationship to young people will take an especially exhausting form if their chaotic life experiences have prevented them from developing a coherent attachment representation. From the point of view of the caregiver, the behaviour of the CC adolescents is highly unpredictable. But the caregivers will also find it difficult to maintain a coherent attitude in this game of confusion. On one occasion they will identify with the adolescents and on another see themselves as their victims in the sense of concordant or complementary counter-transmission. Since it will be very difficult to establish a long-term sturdy attachment relationship, in such a case there is also very little chance of helping the adolescents to work through their often very traumatic experiences. Especially in the task of creating narratives, ways of telling traumatic experiences in particular, and thus finding some meaning in their biography, young people are dependent on the support of attachment figures. Linguistic discourses are of great importance for developing internal working models of attachment (Grossmann, Grossmann & Zimmermann, 1999). Regarding the pupils' often dramatic life histories it is difficult for their caregivers not to become too fascinated by their stories and so to unwillingly confirm them in their roles of victims.

The caregivers in a residential home should be available as attachment figures. "Stronger and wiser" (Bowlby, 1979, p. 203), they are suitable for the role of attachment figure since they may well be expected to meet the three criteria named by Howes (1999) for the identification of attachment figures: "(1) provision of physical and emotional care; (2) continuity or consistency in a child's life; and (3) emotional investment in the child".

In this context a comparison between pedagogical mentors in residential care and psychotherapists could be useful since often it is mentioned that former professionals can be more influential than therapists, as they have the most direct contact with children in residence and therefore have the greatest chance to make change likely (Moses, 2000). Therefore the strategic position of caregivers may be no worse at least than that of psychotherapists, since they share mundane, daily events with the adolescents that can provide many attachment experiences.

In their study about the role of attachment in therapeutic relationships, Dozier and Tyrrell (1998) stress the relevance of "goodness-of-fit" between the therapist who serves as a prototypical example of an attachment figure in adulthood and his patient. Even if there is virtually no reported evidence of therapy-induced change in attachment concepts in their opinion such a change in working models can only occur if the client is challenged to explore his models.

Such a process also depends on the therapist's own attachment representation which will form the "countertransference". Secure attached therapists are better equipped to react flexibly in a noncomplementary manner which is only expected to provide a "correctional emotional experience" (Winnicott, 1971), whereas insecure therapists tend to fulfil the expectations of their clients.

Without doubt such responses in a noncomplementary or noncordant manner are somewhat uncomfortable (Dozier & Tyrrell, 1998). Besides, in a residential setting which is characterized by treating the residents as a group such a corrective action is no easy task. Contrary to the highly artificial therapeutic setting the residential staff cannot afford to suspend the rules of the everyday life in order to provide the pupils with an opportunity to explore alternative working models of caregiver availability without risking to undermine the discipline. After all in contrast to the very intimate and virtually moral-free psychotherapeutic setting, in the residential home the staff-clients encounters will be watched carefully by the other inmates. Especially insecure caregivers will follow the routinized schedule by "running the program". They will be anxious to enforce compliance with set rules and will concentrate on such emotionally unproblematic tasks as helping with school work, organizing leisure time or feeding. Such a de-individualizing treatment cannot but frustrate the youths' attachment needs. The youngsters will feel treated by their interchangeable caregivers as "just a case". Thus the development of behavioural disturbances can be understood as a potent re-individualizing manoeuvre.

Considering the rigidity and effective power of the internal working models of attachment available to the adolescents, taking over the function of an attachment figure makes special demands on the way the residential care situation is staffed. The educational staff must be made conscious of and sensitive to the subject matter and relationships of attachment theory – including in the sense of some personal encounters – if they are to understand the adolescents' complex attachment strategies. Considering the high and often contradictory state of mind scores which refer to the youngsters' representation of the self in relationship to the original attachment figures vehement transference processes are to be expected which will be difficult to contain for their caregivers. Efforts to gain entry into a youth's internal world (Moses, 2000) will become a risky endeavor.

In the residence a very special form of the aforementioned help paradox is to be observed. As our results suggest these young people in the residence who are in need of correcting attachment experiences even by their sometimes quite idiosyncratic and provocating attachment behaviour prevent their caregivers to function as attachment figures despite of their willingness to do so. An attachment theory inspired treatment can help the staff to attribute meaning to the youngters' behaviour and thus to depersonalize their offending affronts (Moses, 2000). So far attachment theory may have a very psychohygienic function.

## *Limitations and concluding remarks*

Since the colorful variety of home situations means that "the residential home" can no longer be found, this study cannot claim to be representative. The way the research is designed should also suggest caution against hasty generalizations. For one thing, the relatively young age of the persons studied speaks against this, even though it is apparently unproblematic to use the AAI from the age of 16 years on (Zimmermann & Becker-Stoll, 2001) and even in late childhood and early adolescence it can be used with only slight adjustments (Ammaniti et al., 2000). Nevertheless the study suffers from an absence of a clear control group. In addition, the quality of the biographical data is not sufficiently assured. The AAI cannot replace objective data because it relates to the present. The information was collected by a sole interviewer.

In particular considering the often dramatic biographical background of the adolescents, an interviewer effect, in the sense of a bias, cannot be totally excluded. The sometimes horrifying narratives might have struck the interviewer in such a way that she unwillingly might have affected the interviewees' thoughts and feelings during the course of the interview. Finally, the stunning overrepresentation of the CC category with its frequent alternative classifications and sub-classifications must raise the question about the appropriateness of the current AAI coding system when conducted with such obviously non-normative populations (c.f. Turton et al., 2001). However, the findings of this study should be an impetus for further research on this clinically and pedagogically relevant Cannot Classify category.

In summary, there can hardly be any doubt that the conclusion is justified that adolescents in residential care are a problem group with high therapeutic needs and – in relation to following generations – a need for preventive intervention. The results of the study may raise doubts that "earned" security is a realistic goal of residential treatment or substitutional education. Nevertheless they demonstrate the usefulness of attachment theoretical reflections to guide intervention in residential care.

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