# Outcome research in residential child care: behavioral changes of treatment completers and treatment non-completers

# Summary

The emotional and behavioral development of children admitted to residential care in the Netherlands was assessed during a period of two years in a sample of 141 youngsters in the ages of 9 till 14. The assessments were made using the Child Behavior Checklist at the admission and at the termination of the care, and for those who left also after a follow-up period of four months. The parents reported significantly more developmental problems upon admission than the care professionals. During the care the opinions converged. The parents became more favorable, while the opinion of the care professionals essentially did not change. Three groups of children were compared: completers, non-completers and children still in care. The non-completers showed significantly more delinquency related problem behaviors upon admission.

## 1. Introduction

In the Netherlands approximately 9,000 youngsters, or 0.24% of the underaged population, reside in institutions for child care or child protection because of psychosocial problems. Compared with twelve other European countries the Netherlands holds a seventh position, preceded by Luxembourg (0.58%), Greece (0.56%), Germany (0.55%), France (0.47%), Denmark (0.41%) and Belgium (0.35%) and followed by Great Britain (0.22%), Spain (0.21%), Italy (0.20%) and Ircland (0.06%) (based on Knorth & Van den Bergh, 1994).

The relatively inconspicuous position of the Netherlands compared with economically and socio-culturally comparable countries such as Belgium, France and Germany is partly due to government policy, which, since the early 1980s, has been focused on a reduction of volume and expenditure on residential care in favor of preventative care projects, outpatient care and placement in foster homes. The basic assumption is that care ought to be 'as light as possible', so that youngsters should only be admitted to institutions when other forms of care have proven to be insufficiently effective. This policy resulted in a current institutional population of children and youngsters suffering from behavioral and psychological problems or educational defects in the original family to such an extent that an extended stay in the home situation or placement in a foster home is out of the question. Because most of them followed the welltrodden path from 'light' to 'heavy' forms of care, their history generally features many previously failed contacts with the care system (Jansen & Oud, 1993). In the late 1980s an increase of problems of institutionalized youngsters was already observed (Van der Ploeg & Scholte, 1988).

The Dutch child care policy, with far-reaching consequences for clients and institutions, is only partly based on knowledge of the development of institutionalized youngsters. One reason for this is the rather limited empirical outcome research which has so far been conducted (Van Gageldonk & Bartels, 1990). The need for outcome research is evident from the fact that the effectiveness of child care and child protection is still largely under debate and the field has little status in society (De Ruyter, Van Hekken & Sanders-Woudstra, 1987). According to many, the existence of a group of extremely troublesome youngsters, who end up in the criminal circuit after a long history of outpatient and residential care, indicates a failing child care system. In addition, critics think that the large number of non-completed placements is an indication of serious inadequacy. In recent years a lot of attention has arisen for people known as (residential) care system 'dropouts' (Wouda, 1988).

As early as in 1984 the Vereniging Groep van Achttien (VGA) initiated research which aimed to fill the knowledge gap described (Smeets, Van Bronswijk, Oud & Welzen, 1985). The VGA is a cooperation of residential institutions for child care in the Dutch province of Noord-Brabant. The research procject that began in 1988 and ran up to 1993 was financed by the Ministry of Welfare, Health and Cultural Affairs at that time and named *Evaluation of residential care* (*Residentiële hulpverlening geëvalueerd*). Its intention was to give a description of the development of institutionalized youngsters and explore the effects of the family focus of the care system on the development of these youngsters (Jansen & Oud, 1990, 1992, 1993). This paper reports on a part of this research project and discusses the following questions: Is there a change in the behavioral and emotional problems of indiviuals when they are placed in residential care and is there a difference in the development of youngsters who go through the care system according to plan (treatment completers) and those who do not (treatment non-completers)? First an outline of outcome research in the Netherlands is presented, as well as a discussion of American research on the basis of an article by Curry (1991).

#### 1.1 Outcome research on residential child care

According to Van Gageldonk and Bartels (1990) there are two forms of outcome research, namely *effect research* and *change* or *progress research*. Effect research measures relevant problem variables before and after contact with the care system and compares these with measurements of one or more control groups composed of people who underwent a different or no treatment. The presence of a control group results in an experimental or quasi-experimental research design. When there is no control group, the authors call the study pre-experimental change or progress research. In this type of research it can never be ruled out, strictly speaking, that a decrease in problems is the result of variables other than the intervention, such as maturation or the natural course of problems and disorders. Research that only measures problem variables at one point in time (as is often the case in follow-up studies) does not pro-

vide insight into changes or effects and is not outcome research according to Van Gageldonk and Bartels' definition.

Presumably, true experimental research on residential care effectiveness in the Netherlands is only carried out within the framework of the Behavioral Therapy Project (Gedragstherapieproject) (Slot, 1988; Slot, Bartels, Heiner, De Kruijff & Distelbrink, 1980). The Behavioral Therapy Project consists of a series of studies of behavioral therapy for adolescents who exibit antisocial behavior. The project includes the development and implementation of a treatment programme based on learning theory, aimed at increasing the youngsters' social competence. There are two studies in this series that concern the effectiveness of this treatment programme within the residential setting. The first was conducted in a penitentiary institute, where an experimental group (9 youngsters) was compared with two control groups (17 youngsters in all). The experimental group, which was offered the behavioral therapy programme, proved to benefit a great deal from the treatment and displayed more progress than the control groups, which underwent the penitentiary institute's conventional treatment. The second outcome research was conducted in so-called Course Homes (Kursushuizen). The development of 34 youngsters from three Course Homes was compared with that of 57 youngsters living in a penitentiary institute. The youngsters admitted to these homes did not develop any more favorably than the penitentiary institute youngsters. However, admission of the Course Home youngsters was considerably shorter (approximately 10 months compared with 19 months for the penitentiary institute).

Quasi-experimental effect research, in which several care systems are compared, has been conducted more frequently in the Netherlands (Van Ooyen-Houben, 1991; Mesman Schultz, 1985 a.o.). Van Ooyen-Houben studied the development of 124 children who were placed out of home in the age from nil to eleven and compared foster home children with children who were placed in institutes. The main conclusion was that children who are placed out of home generally do not 'change much, either in a positive or negative way' (1992, p.175). Especially aggressive, hyperactive behavior and behavior that is difficult to control appears fairly persistent. Children placed in foster care are on average younger and display less problematic behavior than children who are placed in institutes. There was no difference in development between the two groups, which meant that - contrary to expectations - the conclusion could not be drawn that admissions to foster homes had a more favorable outcome than institute admissions. Mesman Schultz studied the populations and procedures of three institutes for intensive treatment. The sample consisted of 174 boys with an average age of 15. A limitation of the study is that not on all occasions the same variables were measured, so that changes in problem behavior are difficult to assess. The conclusion of the study was that a positive treatment effect could be established in a considerable number of the boys (Mesman Schultz, 1985, p. 139). Especially thematic treatment (a programme of various joint activities such as furniture making, conservation of public gardens and forestry, boat and hiking trips) turned out to minimize the risk of non-completion and to increase the chance of favorable adjustment after discharge.

The studies of Mesman Schultz and Herfs (1992) and Veerman (1990) are exemplary for pre-experimental modification research. Mesman Schultz and Herfs examined 90 boys and girls who took part in a self-support training project. Their age varied from 15 to 20. During their

stay no major and entirely favorable change appeared to take place in the psychosocial situation of the youngsters: besides a slight improvement in family relations and a decline in behavioral problems, delinquent and aggressive behavior, the study also showed a slight increase in social problems for the youngsters (e.g. unmanageablity of social situation, police encounters). Veerman (1990) did not find a sharp decline in problem behavior either in his research on the development of children who were admitted to a treatment centre (*Paedologisch Instituut*). The average admission age of the children was eight. The problem variables were determined upon admission by studying the records and after discharge by means of a behavior checklist. Veerman distinguishes internalizing, externalizing and mixed behavioral disorders. At follow-up 54% of the children still appeared to have serious problems to such an extent that (residential) care was necessary. No differences were found in the development of internalizing, externalizing and mixed problems.

Outcome research on residential care outside the Netherlands is also scarce (Curry, 1991; Silver et al., 1992). Curry (1991) presents a good outline of the state of affairs on the American continent. He distinguishes between research on inpatient psychiatric hospitals and research on residential treatment centres. In the United States, too, the outcome research that has been conducted is mainly pre-experimental, in which often only one institute or treatment variant is studied. Therefore, according to Curry, universal claims on the effectiveness of residential care can hardly be made. On outcome research with regard to the effect of psychiatric treatment Curry reports: '(...) the results of these studies of hospitalized youths suggest that although many improve, some do not and that a small percentage may be expected to have a variety of seriously negative outcomes on long-term follow up' (p. 350). The residential treatment homes produce mixed results as well. Some research seems to reveal the importance of active family involvement in the child's treatment. Proper follow-up increases the chance of successful adjustment in the future. Finally, research appears to indicate that it is necessary to pay attention to the transfer of taught skills to situations outside the institute during treatment.

An example of American change research is the study by Kazdin and Bass (1988). Kazdin and Bass examined 140 boys and girls aged 7 to 13, who were admitted to a psychiatric hospital for one to four months. Upon admission the following diagnoses were made: Conduct Disorder, Depression, Attention Deficit Disorder, Adjustment Disorder and Anxiety Disorder. The children's problems were determined by means of a behavioral questionnaire which was upon admission and discharge presented to the parents, the child care workers, the clinic's teacher and the regular teacher. The parents and the regular teacher answered the questionnaire again a year after discharge. The respondents differed in their views on the development of the children. The parents and the regular teacher observed a decrease in problems during treatment, with continued effect a year later; the child care workers and the clinic's teachers did not observe any changes on average. Despite the progress they observed, parents reported considerable problems with their children also after treatment.

The preceding overview shows that the empirical knowledge on outcome of residential care is still very deficient. The studies that were carried out refer either to specific care systems and procedures (Mesman Schultz & Herfs, 1992; Slot, 1988) or to specific institutes (Kazdin & Bass, 1988; Mesman Schultz, 1985; Veerman, 1990) and therefore cannot give an overall pic-

ture of residential care effectiveness. The study by Van Ooyen-Houben is the only one that covers a reasonable number of institutes that is more or less representative of residential child care in the Netherlands. However, the disadvantage of this study is its focus on a restricted age category. Relatively much research has been conducted on young children (Van Ooyen-Houben, 1991; Veerman, 1990) and on late adolescents (Mesman Schultz, 1985; Mesman Schultz & Herfs, 1992; Slot, 1988), but there is still not enough attention paid to the 'middle group' (school-age and early adolescence). It is not possible to come to general conclusions about the effectiveness of residential child care in the Netherlands on the basis of the studies mentioned, even though the impression prevails that the changes occurring when children are placed in care are positive but limited. It does seem to be of importance who is assessing the behavior or problems: parents observe greater behavioral changes than professionals (Kazdin & Bass, 1988). Irrespective of the observer, most youngsters continue to deal with serious problems after residential treatment. For specific care systems the tentative conclusion can be drawn that behavioral therapeutic treatment, focused on reinforcement of social competence, and thematic treatment produce more results than other forms of treatment (Van Gageldonk & Bartels, p. 94-99).

In the research project *Evaluation of residential care* (Jansen & Oud, 1993) a number of objections to the outcome studies described are met. As regards the representativeness of the study, all institutes for child psychiatry and child care in the Dutch province of Noord-Brabant aimed at a specific age were involved in the research. Through half-yearly assessments the development of behavioral and emotional problems, personality characteristics and family relations were registered for a period not exceeding two years. Furthermore, features of the care system were measured also every six months, including family focus of the care system. The effect of family focus was investigated by comparing the development of children treated in a family-oriented way with those youngsters for whom treatment was not or less focused on the family (Jansen & Oud, 1990, 1992, 1993).

The sample consisted of 141 boys and girls. Length of stay varied from less than two months to over two years. Upon admission the youngsters had considerably more behavioral and emotional problems than 'normal' youngsters. Externalizing problem behavior, such as aggression, delinquency and hyperactivity, was especially frequent and severe. The changes that were observed by parents and professionals concerning these problems will be discussed in detail below. In a quasi-experimental design the development of youngsters whose treatment was family-focused was compared to youngsters that were treated with no or less substantial family focus. Considerable differences were not found, however.

#### 1.2 Research problem for this part of the project

The development of institutionalized youngsters was a central issue in the *Evaluation of residential care* research project. The changes in behavioral and emotional problems that occurred during admission are discussed below. The first question to be answered in this paper is therefore: Is there a change in behavioral and emotional problems of youngsters during treatment?

In addition the research project evaluated a large number of treatment characteristics. For

example, the way in which youngsters end their stay. Research conducted by, among others, Jansen (1988), Klingsporn, Force and Burdsal (1990), Smit (1993) and Wouda (1988) has shown that 40 to 65% do not complete residential treatment. The importance of completing treatment properly appears from the fact that non-completion is a good predictor of the level of future adjustment (Jansen, 1988). According to *Evaluation of residential care* a substantial part of the youngsters, namely 53%, did not complete residential treatment. Although this percentage corresponds to those found in earlier research, it caused a great deal of concern among the participating institutes. This motivated a special investigation in non-completion of residential treatment (Arends & Schüllere, 1994). The present paper also discusses the results of this investigation.

The additional questions with respect to non-completion:

- 2. Why do youngsters not complete their treatment?
- 3. Are there any differences between youngsters who do not complete treatment and youngsters who leave according to plan, with respect to behavioral and emotional problems and the changes involved?

# 2. Method

#### 2.1 Sample

The sample consists of children and youngsters aged 9 to 15 who have been admitted to institutes for child care and child psychiatry. Various studies have shown that this age category is predominant in residential care (Smeets a.o., 1985; Van den Bergh, 1991; Van der Ploeg & Scholte, 1988). Use of this age range is an important supplement to research already mentioned by Van Ooyen-Houben (1991), Veerman (1990), Slot (1988) and Mesman Schultz and Herfs (1992). The research was not only restricted to this age category but also to youngsters who were, at the time of admission, expected to stay in the institute for a minimum of two months. Because of this condition a specific type of temporary care, the care given in so-called crisis and orientation groups, was excluded from the research (Jansen & Oud, 1993).

Ten institutes for child care and two child psychiatry clinics took part in the research. These twelve institutes virtually cover the entire supply of residential care for the age category mentioned in Noord-Brabant (the remaining institutes almost exclusively care for younger or older youngsters). The institutes consist of several care units. All youngsters who were admitted to the participating institutes over a 10-month period in 1989 and 1990 and met the two criteria (age and expected length of stay) were included in the sample. This resulted in a group of 141 youngsters.

#### 2.2 Research instruments

The behavioral and emotional problems were registered using the *Child Behavior Checklist* (CBCL) (Verhulst, Koot, Akkerhuis & Veerman, 1990). The CBCL is a questionnaire that consists of 118 items which describe behavioral and emotional problems. By summation of all item scores the Total Problem score is determined, which gives a broad view of the gravity of

the problems. In addition, it is possible to determine scores for clusters of empirically related behavior problems, which are called syndromes. Finally, the CBCL uses the Internalizing and Externalizing scales, which combine syndrome scores. For the Total Problems, Internalizing and Externalizing scales and the eight syndromes there are norm scores in the form of T scores (mean: 50, standard deviation: 10). In order to assess the gravity of the problems the following distinction is made in the height of scores: a normal range, a borderline range and a clinical range (Verhulst a.o., 1990; Pameijer, Zijlmans & Vostermans, 1994).

The way the residential care was completed is recorded by means of a standardized questionnaire specially constructed for the project (Jansen & Oud, 1991). Earlier versions had already been used in a research on completion in a remedial educational centre for learning disabled children (Jansen, 1988) and in a research on population and treatment characteristics of an institute for residential child care (Hendriks & Oud, 1992). The questionnaire, which was answered by a staff member after the youngster had left, includes a question on leaving treatment before completion. Non-completion is defined as leaving before care or treatment is rounded off or before all possibilities for care or treatment are exploited. This definition does not rule out that non-completion is accompanied by a decrease in problems. The emphasis is not on the *effect* of care but on the moment in the care *process* that the care is terminated. Reasons for leaving were listed in the questionnaire by 15 yes-no-questions. Questionnaires could obviously only be answered for the youngsters who left the institute at the time of the research: this was the case for 104 boys and girls.

#### 2.3. Procedure

The CBCL was presented to the parents a couple of weeks after admission to the institute. Subsequently, the questionnaire was answered again by the parents four months after discharge. When a youngster was still in the institute two years after entering it, the CBCL was also presented to the parents and the data collection for that specific child closed.

Besides the parents, the CBCL was answered by professionals who were in charge of daily education and treatment. Thus, the opinion of professionals who were directly involved was included in the research. Although the CBCL was developed for parents, the instructions also recommend its use by child care workers and other professionals, providing that they are sufficiently informed about the youngster (Verhulst et al., 1990, p. 112). In earlier Dutch research the CBCL was presented to parents and child care workers of children in a residential institute and a day-care centre (Meijer & Veerman, 1989). The results show that considerable differences can exist between the perception of parents and professionals. In the research by Kazdin and Bass (1988), too, the CBCL was completed by parents and child care workers and differences were found. The questionnaire was answered by a child care worker six to eight weeks after admission and subsequently every six months. To determine changes in problems a comparison was made between data of the first and last completed questionnaire.

In the parent assessments there was a 40% non-response due to refusal or inaccessibility at the first or second assessment, the absence of parents or injunction by a magistrate of a juvenile court. Non-response also occurred in the group of child care workers, partly caused by eleven

youngsters who did not give permission to collect test results, which was honoured for the benefit of the relationship based on mutual trust between child and professional. There was a further drop-out of youngsters who were discharged within six months and could therefore not be included in the second assessment (after six months). The overall drop-out in child care workers was 30%.

To determine changes in behavioral and emotional problems, the average scores on the CBCL scales and syndromes upon admission were compared to those on discharge or, in the case of continuation of residential treatment, after two years. A negative difference between the first assessment (pretest) and the second (posttest) indicates a decrease in problems, a positive difference refers to an increase. The differences were tested by the (two-tailed) t-test for paired observations. Furthermore, for both assessment periods it was determined how many youngsters belonged to the clinical or borderline range. In order to generate clear results, the borderline and clinical ranges were joined in the *problematic range*. If a score falls in the problematic range, this means that there are problems to such an extent that (residential) care is necessary or has to be considered.

Differences between youngsters who left the institute before completion, youngsters who completed treatment according to plan and youngsters who were still receiving treatment at the close of the research, were examined by comparing the pretest and posttestscores by means of (two-tailed) t-tests. To gain an insight into the extent of non-completion and the reasons for leaving, frequency distribution and cross tabulation tables were drawn up of relevant variables from the Termination Institutionalization questionnaire.

# 3. Results

#### 3.1 Changes in behavioral and emotional problems

Is there a decrease in behavioral and emotional problems during treatment in a residential institute? Table 1 and 2 present the average CBCL scores of parents and child care workers at the start (pretest) and termination of care, or (in some cases) after a two year treatment period (posttest). Furthermore, for both periods the percentages of youngsters that fall in the problematic range are reported.

	pretest		posttest		difference	sign.*
	mean	% problematic	mean	% problematic	mean	р.
Total Problems	70.6**	92	63.6**	66	-7.0	0.00
Internalizing	66.5**	75	60.2**	50	-6.4	0.00
Externalizing	69.5**	86	62.5**	58	-7.0	0.00
Withdrawn	66.2	44	60.7	27	-5.5	0.00
Somatic complaints	59.0	24	57.1	14	-1.9	0.12
Anxious/depressed	67.4**	51	61.0	26	-6.4	0.00
Social problems	66.2	41	60.8	29	-5.5	0.00
Thought problems	64.6	42	59.6	25	-5.0	0.00
Attention problems	69.2**	60	64.4	31	-4.9	0.00
Delinquent behavior	69.1**	64	63.4	39	-5.7	0.00
Aggressive behavior	69.8**	60	62.7	26	-7.2	0.00

**Table 1.** Mean CBCL pretest, posttest and difference scores and percentages of youngsters that fall in the problematic (borderline or clinical) range, respondents parents (N=84)

At the start of residential care (pretest) parents generally report a great many behavioral and emotional problems. For 92% of the youngsters the Total Problem score falls in the problematic range, this is 75% on the Internalizing scale and 86% on the Externalizing scale. Acting out problems, referred to as the Attention problems in the CBCL classification, Delinquent and Aggressive behavior syndromes, are most frequently found. In addition a number of youngsters in the sample have emotional problems at the time they are placed in a home. For the Anxious/depressed syndrome 51% of the sample fall in the problematic range, and Withdrawn and Social problems score relatively high too. There are hardly any psychosomatic complaints, no more or less than in the normative group.

During the posttest the parents still report a lot of problems. Four months after discharge from the institute or two years after entering the institute 66% of the sample score in the problematic range on the Total Problem scale. On the Internalizing and Externalizing scales this score amounts to 50% and 58% respectively. Nevertheless, on average the scores on all CBCL syndromes dropped. The greatest drop was seen in Aggressive behavior and Anxious/depressed, the smallest in Somatic complaints and Attention complaints. However, the score on Somatic complaints was already low upon entering the institute.

	pretest		posttest		difference	sign.*
	mean	% problematic	mean	% problematic	mean	P.
Total Problems	61.6**	66	61.4**	60	-0.2	0.87
Internalizing	59.7	52	59.9	55	0.2	0.88
Externalizing	59,4	57	60.4**	59	1.0	0.40
Withdrawn	62.0	33	62.5	34	0.5	0.67
Somatic complaints	55.0	9	56.3	14	1.3	0.18
Anxious/depressed	60.6	22	60.9	31	0.3	0.80
Social problems	60.3	26	60.2	27	-0.1	0.96
Thought problems	59.9	25	59.7	30	-0.2	0.84
Attention problems	62.6	30	61.6	32	-1.0	0.32
Delinquent behavior	62.8	41	62.8	38	0.0	0.98
Aggressive behavior	59.0	27	60.8	33	1.8	0.70

**Table 2.** Mean CBCL pretest, posttest and difference scores and the percentages of youngsters that fall in the problematic (borderline or clinical) range, respondents youth care workers (N=98)

Shortly after the child's admission, the child care workers appear to report not as many problems or assess these as less serious problems than the parents. Although child care workers score 66% of the youngsters in the clinical or borderline range on the Total Problem score (parents' score 92%), the average pretest scores on the Externalizing and Internalizing scales and on the syndromes all fall below the problematic margin. The highest scores are achieved for the Withdrawn, Attention problems and Delinquent behavior syndromes; in the pretest the Aggressive behavior syndrome scores surprisingly low on average.

In the posttest the scores have hardly changed. The percentage of youngsters in the problematic range of Total Problem score decreases to 60, but this does not reveal itself in a significant drop in syndrome scores. The only significant improvement that the child care workers observe relates to item 46 (Nervous moments or twitching) and 75 (Shy or timid). By way of comparison: parents on average reported a decrease in 52 of the 91 items belonging to the eight syndromes. It is striking that the posttest scores of the child care workers correspond much more to those of the parents than the pretest scores.

#### 3.2 Treatment completers and treatment non-completers

Does the development of youngsters who complete residential treatment differ from those that do not? Before answering this question, it is useful to consider the question why one child completes residential treatment according to plan and another child leaves before completion.

Apparently, children frequently leave before completing treatment. Of the 104 youngsters who left the institute during the research, more than half (53%) left before the treatment was rounded off. The others completed treatment according to plan (47%). This result corresponds to earlier research reports (Klingsporn, Force & Burdsal, 1990; Wouda, 1988). Table 3 represents the reasons for termination of treatment of the treatment completers and treatment non-completers.

 Table 3. Reasons for termination of treatment of the treatment completers and treatment

 non-completers

	treatment completers (N=49)		treatment non- completers (N=55)	
	n	%	n	%
Positive reasons:				
Achievement of treatment goals	39	80	10	18
Improvement of behavior/problems	32	65	1	22
Improvement of home situation	29	59	10	18
Negative reasons:				
Unilateral termination of care	2	4	32	58
Deterioration of behavior/problems	4	8	26	47
Run away and not come back	0	0	18	33
Conflicts between child and other group members	1	2	13	24
Conflicts between child and youth care workers	4	8	12	22
Youth care workers can't deal with difficult behavior	5	10	17	31
Deterioration of home situation	2	4	5	9
Parents keep the child at home	0	0	12	22
Difference of opinion about upbringing	1	2	13	24
Conflicts between parents and youth care workers	0	0	6	11
Neutral reasons:				
Institution lacks necessary treatment	9	18	26	47
Child doesn't belong to the target group (anymore)	14	29	19	35

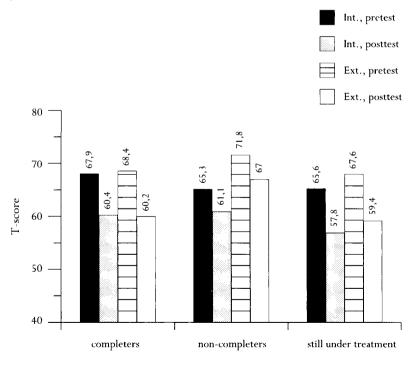
The reasons for termination can be roughly divided into positive, negative and neutral reasons. Contrary to treatment completers, non-completers seldom showed positive reasons for termination, such as achievement of treatment goals, improvement of problem behavior and improvement of the home situation. Non-completion often coincides with unilateral termination of care by parents or youngster, deterioration of behavior or problems, incapacity of child care workers to deal with difficult behavior and absconding. With regard to this group the residential institutes frequently have to draw the conclusion that the treatment offered is inadequate.

### 3.3 Difference in development of treatment completers and non-completers and children who still receive treatment

Besides the group that completed treatment according to plan (treatment completers) and the group that terminated treatment before completion (treatment non-completers), a third category can be distinguished, namely youngsters who were still in the institute when the research described here was concluded. Below this group will be referred to as 'youngsters still under treatment'. This group stands out because of the relatively long period of treatment. The last time the problems of this group were assessed by parents and child care workers was two years after entering the institute.

The development of treatment completers and non-completers and of the youngsters still under treatment has been registered separately by calculation of pretest and posttest scores on the Total Problems, Internalizing and Externalizing scales and on the eight syndromes for these three groups. The pretest and posttest scores on the Internalizing and Externalizing scales of the three groups are represented in two figures. Figure 1 gives the parents' assessments, Figure 2 the child care workers' assessments. Remarkable results concerning the level of syndromes will be discussed in the text.

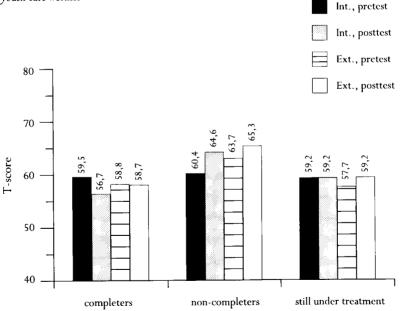
**Figure 1.** Mean pretest and posttest scores of treatment completers (n=37), treatment non-completers (n=31) and youngsters still under treatment (n=19) on Internalizing and Externalizing, respondents: parents



The pretest results of parents do not indicate major differences between the three groups at the start of treatment. What strikes most is the relatively high score, although it does not significantly diverge from the pretest score of the non-completers on Externalizing. On syndrome level there are significant differences. Non-completers upon admission score higher than both other groups on Delinquent behavior, whereas they score lower than the completers on the Anxious/depressed and Social problems syndromes. The posttest results show more distinct differences between the three groups. The non-completers on average score higher than the completers and the youngsters still under treatment on the Externalizing scale, which is caused by a higher score on the Delinquent behavior syndrome. Furthermore, on syndrome level non-completers distinguish themselves by a higher score on Attention problems (compared to both other groups) and on Withdrawn (compared to youngsters still under treatment).

Although there is a significant drop in scores on the Internalizing and Externalizing scales for all groups, the completers and the youngsters still under treatment benefit most from treatment, according to the parents. Both of these two groups show a drop in all syndrome scores, with the exception of Somatic complaints. There is no significant decrease in any syndrome for the non-completers.

**Figure 2.** Mean pretest and posttest scores of treatment completers (n=40), treatment non-completers (n=30) and youngsters still under treatment (n=28) on Internalizing and Externalizing, respondents: youth care workers



In the pretest the child care workers give significantly higher scores to the non-completers than to the other groups on Externalizing (Figure 2). On syndrome level the non-completers distinguish themselves (from both other groups) because of a higher pretest score on Delinquent behavior and (compared with completers) because of higher pretest scores on Attention problems and Thought problems. At posttest the non-completers appear to stand out unfavorably once again. On average they score significantly higher than all other youngsters on the Externalizing scale and on the Withdrawn and Delinquent behavior syndromes. Additionally, compared to treatment completers, a higher posttest score is observed on the Internalizing scale and on the Anxious/depressed and Thought problems syndromes. The child care workers do not observe a significant increase or decrease in problem behavior for treatment completers and youngsters still under treatment. However, the non-completers show a significant increase on the Internalizing scale and the Anxious/depressed syndrome.

In the opinion of the child care workers, differences between the youngsters who will not complete treatment and the other youngsters can already be observed upon admission. In short, non-completers stand out because they display more (pre)delinquent behavior, more attention problems and hyperactivity, more fixations, obsessive actions and odd behavior. According to child care workers, youngsters who do not complete treatment suffer more from anxiety, depression and feelings of inferiority upon termination of care than they do upon admission.

# 4. Conclusions and discussion

Because of the differences in assessment by parents and child care workers it is not possible to draw a 'simple' final conclusion on the change in behavioral and emotional problems that takes place during stay in a residential center. According to the parents there is a decrease in problems during the stay, according to child care workers the difference in problems upon discharge or two years after admission is negligible compared with the situation upon admission. It should be noticed that this corresponds to results found by Kazdin and Bass (1988).

A possible reason for the difference in assessment is the relative unfamiliarity of the child care workers with the child upon admission. Because parents are more familiar with their child it is possible that they give higher scores in the pretest on the problem variables than the child care workers. This explanation is backed by the strong similarity between the parents' and child care workers' assessments in the posttest. A second possible explanation is the subjective burden that parents experience at the moment the child is placed in care. They experience intolerably serious parenting and behavior problems which cannot be solved by outpatient care. During admission the family can settle down again. This could be expressed in lower CBCL scores, which according to this course of reasoning not only measure the youngsters' problems, but also the subjective parent burden. Thus, the child care workers would draw a more objective picture of the problems than the parents. According to this interpretation residential care affects family burden rather than the problems of the institutionalized youngsters. This interpretation cannot hold, however, or only to a lesser extent, for the large group that were not living with their original families prior to admission (46% of the sample) but in other institutes or foster homes. Thirdly, it is possible that children and youngsters strongly conform and restrain themselves right after admission and that problems are only expressed later on. That many youngsters who are placed in care do not exhibit the problem behavior for which they were admitted until a couple of months after admission is readily acknowledged by professionals. The results of the half-yearly CBCL measurements indeed reflect an increase in problems reported by child care workers in the first six months, followed by a decrease (Jansen & Oud, 1993, p. 62).

Despite the differences in assessment found and their possible explanations, the positive judgement of the parents on the development of the child stands. In a client-orientated era the opinion of the parents is of great importance. Even when treatment is not completed, parents on average observe a slight decrease in problems. The CBCL results indicate that non-completers already distinguish themselves from completers at the start of treatment, in the sense that they display distinctive (pre)delinquent behavior. In addition, non-completers, according to the child care workers, suffer more from thought problems and attention problems. These differences increase during admission. Besides, upon discharge non-completers appear to be more socially withdrawn than the completers (according to both parents and child care workers) and suffer more from anxiety and depressive complaints (according to child care workers). The non-completers develop less favorably than the group which has completed treatment according to plan. Child care workers generally even observe a slight deterioration in the non-completers. Klingsporn, Force and Burdsal (1990) also found that the group who followed residential treatment as planned, has the fewest problems upon admission and shows greatest progress during admission. Youngsters who do not complete treatment stand out upon admission because of more and more serious problems. It seems as if the group that needs help most, receives it least.

Klingsporn's et al. (1990) observations and our own research results indicate that residential institutes regularly admit youngsters who are not likely to complete treatment. This concerns a group with serious problems that could not be treated by out-patient care and for which the institutes turn out not to have the essential treatment facilities either. They exhibit extreme forms of aggressive and delinquent behavior and can further be typified as socially withdrawn. It seems that the essential therapeutic relationship needed for effective help is not established with these youngsters. The relationship with their parents is often disrupted through arguments and conflicts. More adequate (family) diagnostics prior to admission could partly prevent this problem or reduce the number of dropouts. A stricter selection 'at the front door' would not only be good for the client, who is spared a pointless treatment, but also for the institute itself because of a more efficient use of resources.

These arguments, however plausible, can be opposed. Since the Second World War mental health care has seen an increase of treatment optimism, ostensibly more than in other sectors of treatment and care such as treatment of drug addicts and nursing. Zimmerman (1990) illustrates this in his description of the development the criteria for 'successful treatment' underwent over the past forty years. While residential treatment was first considered to be successful if recidivism of offences and readmission could be prevented and the youngster was able to return and adjust to the original family, in the late 1950s this was no longer considered sufficient. Partly influenced by humanistic psychology, the achievement of greater autonomy, individuation and an own identity became more prominent. Over the last decade the emphasis has been on decreasing problem behavior, intrapsychic problems and psychopathology. Although this objective is less sweeping than developing autonomy and an own identity, high hopes have been aroused, both in the people involved and in society. The research that has so far been conducted questions these hopes, which are partly created by mental care systems themselves. What is certain is that currently there are not enough effective treatment programmes (...), which suggests a lack of interest in treatment. However, because of the lack of alternatives residential care should not shut out these youngsters, but should be given the opportunity to offer to them, like the other youngsters, relief and treatment based on realistic goals and well-considered drop-out risks. These goals can also be more modest than in the past: prevention of worse, or even slowing down deterioration.

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