The downside up? A study of factors associated with a successful course of treatment for adolescents in secure residential care

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CHAPTER 6

SECURING THE DOWNSIDE UP: CLIENT AND CARE FACTORS ASSOCIATED WITH OUTCOMES OF SECURE RESIDENTIAL CARE FOR ADOLESCENTS

"Ik zal nooit helemaal veranderen zoals zij dat willen…"
["I will never change completely the way they want it…"]
(15-year old girl, staying in secure residential care)

"Je moet zelf ook open staan voor dingen die je niet kan en dan komt het wel goed. Dat doen heel veel jongeren niet.., die willen niet zien wat ze verkeerd doen. Dat is ook heel moeilijk, hoor"
["You must also be open to things that you are not able to and then it will be all right. Many young people don't do that.., they don't want to see what they do wrong. That is also very difficult, you see"]
(17-year old boy, staying in secure residential care)

Abstract

Research on secure residential care often considers recidivism as the main outcome while other types of outcomes give more insight into how outcomes are achieved. Therefore, aim of the present study is to assess adolescents' behavior change during care and their treatment satisfaction, and to identify whether client and care factors that are considered to be important in achieving outcomes are associated with these outcomes. The results showed that adolescents reported positive changes in their motivation for treatment, but that those who were more likely to be motivated at admission were also more likely to deteriorate in treatment motivation from admission to departure. Treatment satisfaction was associated with better treatment motivation at admission and a positive adolescent-group care worker relationship. The result suggests that outcomes can be improved by a more explicit focus on improving adolescents' treatment motivation and the client-staff relationship during secure residential youth care.

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6.1 Introduction

Research suggests that the problem behavior of young people in secure residential care, which often includes delinquency, is quite stable over time. Secure residential care can be seen as the most intensive or restrictive type of residential care, and refers to a type of service in which young people, who are often placed under coercion, receive care and treatment in a secured environment. While youth still regularly show problem behavior after their departure, secure residential care has more positive outcomes on the short term: young people often improve in their functioning during secure residential care (Knorth et al., 2008). Furthermore, meta-analyses show that treatment of delinquent youth in residential care leads to an average reduction of recidivism by about 9% (Grietens & Hellinckx, 2004). These findings indicate that (secure) residential care has the potential of reducing problem behavior, but that it is often difficult to achieve.

Non-specific client and relationship factors, which affect the services offered regardless of the target group or the type of services, are considered to be the most important predictors of positive outcomes in child and youth care (Carr, 2009; Karver et al., 2006). Client factors consist of the factors that are part of the client, such as the severity of the problems, the clients' strengths and motivation for treatment, and factors that are part of their context, such as social support in their environment. Relationship factors refer to the therapeutic relationship, which is most commonly defined as an emotional connection (e.g. affective attachment, affective bond, social support) and/or a cognitive connection in terms of agreement on the tasks and goals of treatment (Karver et al., 2005).

Because adolescents in secure residential care typically are not self-referred and often enter into treatment poorly aware of their problems, resistant to change, and/or in conflict with their parents, client and relationship factors seem to be especially important in the context of secure residential care (cf. Karver et al., 2006; Van Binsbergen, Knorth, Klomp, Ruijssenaars, & Meulman, 2004). Moreover, previous research results indicate that there is a strong association between the quality of the client-therapist relationship and treatment outcomes for young people with externalizing problems (Shirk & Karver, 2003), which is a group that is often strongly represented in secure residential care (Bullock et al., 1998).

The client's expectations of and motivation for treatment are important client factors influencing the relationship (Karver et al., 2005; Karver et al., 2008). A lack of motivation for treatment is often considered to be a characteristic of young people in secure residential care (Van Binsbergen, 2003). Despite this, there are very few studies that have looked at the association between motivation for treatment and outcomes of secure residential youth care (cf. Englebrecht et al., 2008). The one study that we found shows that youth in secure residential care who have a higher level of

motivation for treatment show better outcomes in terms of retention than youth with a low level of motivation (Orlando et al., 2003). Research also shows that motivation for treatment of the young people can be developed during secure residential care, although a functional therapeutic relationship to promote motivation for treatment is more difficult to establish with youth showing serious psychopathology than with youth showing less serious psychopathology (Van Binsbergen, 2003).

A more positive relationship between youth and therapists is associated with positive outcomes in terms of more satisfaction of young people regarding treatment (Ramos et al., 2006; Van Yperen, 2003). Research also indicates that the relationship between staff and young people in care has an important role in association with poor outcomes, such as drop-out of care (cf. Garcia & Weisz, 2002; Robbins, Turner, Alexander, & Perez, 2003). Dropping-out of care seems to be quite common in residential youth care (e.g., Kashubeck, Pottebaum, & Read, 1994; Klingsporn, Force, & Burdsal, 1990; Sunseri, 2001). Young people that drop out of residential care show more negative outcomes than youth who do not leave care prematurely, and this seems to be especially true for young people who are unmotivated for treatment, inaccessible for staff, and who show problematic behavior while in care (Harder, Kalverboer, & Knorth, 2011; Van der Ploeg, Scholte, & Berg, 2000).

Of the few studies that have looked at the association between the client-staff relationship and outcomes in the context of secure residential youth care, two studies did not find an association between the adolescent-staff relationship and outcomes in terms of change in the young people's problem behavior (Holmqvist et al., 2007; Zegers, 2007). The one study that did found a positive association between a good client-therapist relationship and reduction of problem behavior indicated that the establishment of a positive relationship with the most severely delinquent youth is problematic (Florsheim et al., 2000). Furthermore, Florsheim et al. (2000) concluded that the development of the relationship over time seems to be of more importance for obtaining positive outcomes than the absolute value of the relationship between youth and practitioners shortly after admission.

Despite the fact that both the adolescents' behavior problems and motivation for treatment, and the client-staff relationship seem to be important factors for achieving positive outcomes in secure residential care, few studies have looked at both these factor in relation to outcomes. Furthermore, outcomes of secure residential youth care are often described in terms of delinquent behavior (cf. Abrams, 2006; Genovés et al., 2006), while other type of outcomes, such as treatment satisfaction and change in adolescents' behavior during the care process might give more insight into the process of care. By studying how outcomes are achieved, concrete suggestions for improvements in care practice can be made. Therefore, the aims of the present study are to 1) assess the outcomes of secure care in terms of adolescents' behavior change during care and their treatment satisfaction, and 2) to identify whether the

adolescents' behavior problems at admission, and the quality of the client-staff relationship are associated with these outcomes.

The present study contains two studies. In the first study, we will focus on the behavioral changes of the adolescents during care in terms of change in motivation for treatment and competence skills, because the secure care center in the present study mainly intervened with the problem awareness, motivation for treatment and competence skills of the adolescents (Harder et al., 2007). The second study focuses on the treatment satisfaction of the adolescents as the outcome of care. In both studies we will look at the association of these outcomes with client and care process characteristics. Client characteristics are assessed in terms of treatment motivation of adolescents at admission and in terms of a distinction in four risk groups within the present sample that were found in a previous study (see Harder, Knorth, & Kalverboer, 2011). These subgroups are based on a combination of treatment motivation with other important dynamic risk factors, such as substance abuse, poor parental supervision and having delinquent friends, and were found to show significant differences regarding the seriousness and type of problems. The groups include a 1) low risk, 2) individual risk, 3) individual and family risk, and 4) high risk group.

On the basis of findings in previous studies, we expect that most of the adolescents will show improvements in their functioning during their stay in secure residential care (cf. Knorth et al., 2008). We also expect that adolescents who are motivated for treatment, who show relatively few behavior problems at admission and experience a good relationship with staff, have more positive outcomes than adolescents with a poor treatment motivation, many behavior problems and a poor relationship with staff (cf. Orlando et al., 2003).

6.2 Method

Both studies that are presented in this article are part of a broader research project which focuses on adolescents staying in Het Poortje: a secure residential center that is located on two sites in the north of the Netherlands. Adolescents from 12 to 23 years old are placed in the center by either a civil or penal measure. The principal reason for admission is either intolerably disruptive and antisocial behavior or behavior presenting a danger to the young person him or herself or to the general public.

Important components of care and treatment in the center are activities at the (mostly secured) residential groups and education in special education classes. At the moment of data collection, many adolescents stayed on residential groups with a maximum of twelve other adolescents, supported by two group care workers on a daily basis. The classes consisted of eight to ten adolescents at the internal school, where they receive training by teachers. The primary, underlying methodology of the

care and treatment in the secure center was considered to be the social competency model (Durrant, 1993; Slot & Spanjaard, 1999).

During their stay in the center, each adolescent is assigned to a coach and a mentor. The *coach* is one of the care workers of the residential group and the *mentor* is one of the teachers of the adolescent at the internal school. The assignment to care workers and teachers as coach and mentor respectively is unsystematic and mainly based on the order of placement. Both the coach and mentor are responsible for observing the adolescents and are involved in the adolescents' individual treatment planning.

The total research project had a longitudinal design with four moments of measurement: at admission (T_1), eight weeks after admission (T_2), at departure (T_3) and one year after departure (T_4). A group of adolescents that entered the center between 1 September 2007 and 1 June 2008 was eligible for inclusion in the study. Adolescents were included if they were able to understand the Dutch language, stayed for a minimum period of eight weeks and had left the center. These criteria resulted in a group of 180 adolescents that was eligible for inclusion in each study.

6.3 Study 1

For the first study, we used information from questionnaires administered with the adolescents and group care workers (i.e., coaches) at admission (T_1) and departure (T_3) to view changes in adolescents' behavior from T_1 to T_3. We also used information from interviews administered with adolescents and questionnaires administered with group care workers (i.e., coaches) and teachers (i.e., mentors) eight weeks after admission (T_2).

Since there often was no information about the exact moment of departure and the moment of departure in most cases just became clear after the young person had already left the center, it was problematic to get into contact with the adolescents for administering the interviews and questionnaires at departure. Due to this fact, 31 adolescents (17%) completed questionnaires on average 6.9 weeks after their departure, of whom 22 adolescents had also completed the questionnaires at admission. Parallel to this group of adolescents, 44 group care workers (24%) completed questionnaires on average 1.9 weeks after the adolescents' departure, resulting in a group of 27 group care workers that completed the questionnaire about the adolescents' competence at admission and departure.

6.3.1 Participants

Two subgroups of adolescents were distinguished in this first study. The first group consists of 22 adolescents whom completed the motivation for treatment

questionnaire at T_1 and T_3. The second group consists of 27 adolescents for whom coaches completed competence skills questionnaires at T_1 and T_3. Information on key background measures at the moment of admission (i.e., demographic and problem characteristics) of these two response groups, which is based on information from the center's administration department and treatment documents, are shown in Table 6.1.

Table 6.1
Adolescents' characteristics for adolescent and coaches response groups

Characteristic	1) T_1-T_3 motivation adolescents (n = 22)		2) T_1-T_3 competence coaches (n = 27)	
	M	*SD (range)*	*M*	*SD (range)*
Age at admission	16.2	1.6 (13.4-20.0)	16.3	1.3 (13.2-18.3)
	N	*%*	*N*	*%*
Sex (male)	15	68.2	20	74.1
Ethnicity (Dutch origin)	16	72.7	18	66.7
Measure of placement (civil)	17	73.9	21	77.8
Place of origin (close by the center)	10[a]	52.6	17	63.0
Living arrangement before admission[b]				
At home with (one of the) parents	6	30.0	13	50.0
Residential setting (incl. secure)	9	45.0	9	34.6
Living with (foster)family	4	20.0	1	3.8
Independent	2	5.0	2	7.7
Instable/ homeless	0	0	1	3.8
Care history before admission	22	95.5	26	96.3
Externalising behavior problems	19	81.8	26	96.3
Internalising behavior problems	9	40.9	11	40.7
Delinquent behavior	9[c]	45.0	21	77.8

Note. There is an overlap of five adolescents between the two groups.
[a]n = 19. [b]n_{group1} = 20 and n_{group2} = 26. [c]n = 20.

To examine possible attrition bias, we looked at differences between the response and non-response groups in terms of background (see Table 6.1) and relevant characteristics that were known for most of the adolescents (e.g., the client-staff relationship, adolescents' motivation for treatment and competence skills at admission). Results of these analyses showed that the adolescents' response group significantly less often stayed with parents, $\chi^2(1) = 4.6$, $p = .035$, and less often showed delinquent behavior before admission, $\chi^2(1) = 9.0$, $p = .005$, than the non-response group. The response and non-response coach groups did not significantly differ, although there was a trend ($p = .096$) for adolescents in this response group to report a poorer relationship with their mentor than the non-response group, $U = 720.5$, $z = -1.67$, $r = .15$. These results indicate that the adolescent response group is less problematic than the non-response groups. For the group of 27 adolescents for whom there was care workers information, we found no indications for an attrition bias.

6.3.2 Instruments

Adolescent-staff relationship

To assess the quality of adolescent-staff relationship, we used information from Psychological Availability and Reliance on Adult (PARA, Schuengel & Zegers, 2003) interviews with the adolescents. By using the PARA we assessed the adolescent's experiences in their relationship with their coach and mentor. The PARA contains 19 items with a 4-point Likert scale ranging from 1 (disagree) to 4 (agree). For the present study, we calculated a total mean score for an overall indication of the quality of the relationship. In accordance to Schuengel and Zegers (2003), we assume that scale scores lower than 2,5 indicate that the adolescent or staff do not subscribe the viewpoint regarding the relationship, and that scores equal to and above 2,5 do so. We found satisfactory reliability scores for both the adolescent (α = .85 -.91) and adult PA and RA scales (α = .69 - .94).

Motivation for treatment

To evaluate the adolescents' motivation for treatment, the Motivation for Treatment questionnaire (MTQ, Van Binsbergen, 2003) was completed by the adolescents. Aim of the instrument is to assess the first three stages of treatment motivation (i.e., precontemplation, contemplation and preparation) that are distinguished by Prochaska and DiClemente (1984). The original version of the MTQ consisted of 81 items, but for the present study we only used a short 17-item version of the questionnaire based on outcomes of factor-analysis conducted by Van Binsbergen (2003). The items of the MTQ contain a 3-point rating scale ranging from 0 (not true) to 2 (true). On the basis of the three subscale scores a total motivation score was calculated by weighing the scores on the stages of motivation as one, two and three respectively, resulting in a range of scores from 0 (not motivated) to 12 (motivated). Total median scores of 6,5 or higher can be perceived as being motivated. Reliability scores (α = .73 - .77) of the MTQ for the present sample were satisfactory.

Adolescents' competence skills

For the evaluation of the adolescents' competencies, the Adolescents' Tasks and Skills Questionnaire (TASQ) was completed by the coaches. The TASQ was developed within the scope of a PhD project in a Dutch secure residential child and youth care setting (Van der Knaap, 2003). Aim of the instrument is to assess the degree to which a youngster's functioning is adaptive or effective in relation to salient developmental tasks (i.e., normative demands and expectations), as judged by a group care worker. The TASQ consists of 137 items concerning the adolescents' skills, plus an appendix questionnaire of 18 items concerning skills regarding the secure care context. All the

items contain a 5-point Likert scale ranging from 1 (totally not applicable) to 5 (totally applicable). The questionnaire consists of 29 subscales and six dimensions of competence containing 25 of the 29 subscales. The six broad dimensions include: 1) peer relationships (29 items); 2) autonomy and self-management (24 items); 3) academic competence; 4) job competence; 5) sexuality and relationships; and 6) personal hygiene and well-being. A mean score can be calculated for each dimension, and for the present study we also calculated a mean total competence score based on these six dimensions. A mean total score that is equal or higher than the median of 3 is perceived as sufficient competency. We could not calculate reliability scores due to missing items that resulted in a very small sample. However, for a sample of 184 young people in residential care in the study of Van der Knaap (2003) the internal consistency of the TASQ was satisfactory (α = .76 - .92).

6.3.3 Data analysis

The change in adolescent's motivation for treatment and competence from admission (T_1) to departure (T_3) was assessed by using the Wilcoxon signed-rank test. The threshold for significance in these analyses was set at $\alpha \leq .10$, because of the small sample sizes. We also assessed whether there was a difference in the number of motivated versus unmotivated and competent versus incompetent adolescents from admission to departure by using the McNemar test.

To determine whether the adolescents' motivation for treatment and the quality of client-staff relationship were associated with change in motivation for treatment and in competence skills, we conducted univariate analyses by applying Mann-Whitney tests and correlation analyses. We conducted a Kruskal-Wallis test to assess differences between the four risk groups. For these analyses, we also applied a threshold for significance at $\alpha \leq .10$. By using the Bonferroni correction the threshold for significance for the post-hoc analyses with the Mann-Whitney test was set at $\alpha \leq .017$.

6.3.4 Results

Change in treatment motivation and competence

The change in motivation for treatment and competence skills of the adolescents are shown in Table 6.2.

Table 6.2
Change in adolescents' motivation for treatment and competence from T_1 to T_3

Variable	Admission (T_1)		Departure (T_3)	
	M	*SD*	*M*	*SD*
Motivation for treatment (*n* = 22)	6.08	2.27	6.88	1.91
Stage 1 Precontemplation	1.32	0.58	1.31	0.59
Stage 2 Contemplation	0.79	0.63	0.73	0.50
Stage 3 Preparation†	1.06	0.61	1.37	0.61
Competence skills (*n* = 27)	3.07	0.56	3.07	0.43
Peer relationships	3.05	0.56	3.05	0.52
Autonomy and self-management	2.91	0.61	3.01	0.51
Academic competence	3.03	0.75	2.91	0.81
Job competence	2.71[a]	1.04	2.97	0.98
Sexuality and relationships	3.13[b]	0.83	2.88	0.68
Personal hygiene and well-being	3.36	0.66	3.35	0.42

Note. The total motivation for treatment scores ranges from 0 to 12 and the three subscales scores from 0 to 2. Competency scores range from 1 to 5. Higher scores can be perceived as a higher motivation for treatment and more competence skills. A motivation score ≥ 6,5 and a competence score ≥ 3 is perceived as sufficient. Changes from admission to departure have been calculated by using the Wilcoxon signed-rank test.
[a]*n* =26. [b]*n* =24.
†$p \leq .10$.

According to group care workers there was no significant change in competence skills of the adolescents during their stay in the center. Adolescents reported an increase in the preparation stage score of motivation for treatment from admission to departure (T = 51.5, r = .26, p = .081). Two more adolescents (9%) could be considered motivated for treatment at departure than at admission. Furthermore, there were three more adolescents (11%) that could be perceived as sufficiently competent at departure while they were perceived as incompetent at admission, but the McNemar tests showed no significant differences in competence from admission to departure.

Client and care process factors associated with change

The results of the univariate analyses between client and care factors and outcomes in terms of change in motivation for treatment and competent functioning during secure care are shown in Table 6.3.

Table 6.3
Correlations between adolescents' motivation, adolescent-staff relationship and outcomes

			Client-staff relationship							
	Motivation for treatment		Adolescent-coach		Coach-adolescent		Adolescent-mentor		Mentor-adolescent	
Outcome variable	*r(s)*	*n*	*r(s)*	*N*	*r(s)*	*n*	*r(s)*	*n*	*r(s)*	*n*
Motivation T_1-T_3	-.61**	22	-.06	21	.08	15	.05	19	-.10	15
1) Precontemplation	-.17	22	.05	21	.02	15	.33	19	.15	14
2) Contemplation	-.24	22	.32	21	.03	15	.04	19	.04	15
3) Preparation	-.50*	22	-.22	21	-.03	15	.05	19	-.29	14
Competence T_1-T_3	.00	16	.25	21	-.14	23	-.03	19	-.14	21

Note. Associations have been calculated by using Spearman's correlation coefficients. A positive correlation means that the higher the variable score, the higher the positive change score is. The adolescent-coach and adolescent-mentor rows apply to the relationship as perceived by the adolescents. The coach- and mentor-adolescent relationship is the relationship as perceived by the coach and mentor respectively.
*$p \leq .05$. ** $p \leq .01$.

The results showed that adolescents who report to be better motivated for treatment at admission were likely to report deterioration in their motivation score from admission to departure. The Kruskal-Wallis test showed no significant differences in treatment motivation or competence skills change during care between the low risk, individual risk, individual and family risk, and high risk group.

6.4 Study 2

For the second study, we used the same information that was collected at admission (T_1) and eight weeks after admission (T_2) as described in the first study. We additionally used T_2 questionnaires from 51 adolescents (28%) concerning their treatment satisfaction, which were filled in on average 10.1 weeks after their admission.

6.4.1 Participants

Information on key background measures at the moment of admission (i.e., demographic and problem characteristics) of the 51 adolescents in the sample are shown in Table 6.4.

Table 6.4
Adolescents' characteristics (*n* = 51)

Characteristic	*M*	*SD (range)*
Age at admission	16.0	1.6 *(12.4-20.0)*
	N	*%*
Sex (male)	33	64.7
Ethnicity (Dutch origin)	33	64.7
Measure of placement (civil)	39	76.5
Place of origin (close by the center)	21[a]	42.9
Living arrangement before admission[b]		
At home with (one of the) parents	25	51.0
Residential setting (including secure)	17	34.7
Living with (foster)family	6	12.2
Independent	1	2.0
Instable/ homeless	0	0
Care history before admission	46[a]	93.9
Externalising behavior problems	46	90.2
Internalising behavior problems	19	37.3
Delinquent behavior	30[c]	62.5

[a]*n* = 49. [b]*n* = 49. [c]*n* = 48.

The response group seemed to be less problematic than the non-response groups, because the response group reported significantly higher motivation for treatment scores at admission, $U = 896.0$, z = -2.52, $r = .24$, $p = .011$, and was less likely than the non-response group to show delinquent behavior before admission, $\chi^2(1) = 3.7$, $p = .059$.

6.4.2 Instruments

In addition to the instruments used in the first study, we used a treatment satisfaction questionnaire that will be described next.

Treatment satisfaction

The C-test questionnaire (Jurrius, Havinga, & Strating, 2007) was used to assess the adolescents' satisfaction about the care they received from the secure care center. This 27-item questionnaire aims to measure client satisfaction in child and youth care. It contains five subscales, a blank subscale which can be filled in with items that are relevant for the specific care setting, and a report mark concerning the treatment satisfaction that ranges from 1 to 10. The subscales measure the following dimensions of treatment satisfaction: 1) contact and treatment by the therapist (five items), 2) professionalism of the therapist (four items), 3) the course of treatment (four items), 4) receipt of information during care (four items), and 5) goal attainment (four items). Items are scored on a 4-point scale ranging from 1 (totally disagree) to 4 (totally

agree). Based on all item scores a total mean satisfaction score can be calculated, which is perceived as sufficient if it is equal or above the mean score of 2,5. The report mark is sufficient if the score is 5,5 or higher. All the subscales showed good reliability (α = .82 - .92), except for the receipt of information scale (α = .67) which could be considered acceptable.

6.4.3 Data analysis

Differences between the five dimensions of treatment satisfaction were assessed by using the Friedman's ANOVA test. Because of the small sample size, we applied a threshold for significance at α ≤ .10. For the post-hoc analyses with the Wilxocon signed-rank test we applied a Bonferroni correction, which resulted in α ≤ .01 as a threshold for significance.

To determine whether there was an association between client and care process variables and treatment satisfaction, we conducted similar analyses as in study 1.

6.4.4 Results

Treatment satisfaction

The satisfaction scores of the adolescents about the care they received are shown in Table 6.5.

Table 6.5
Adolescents' satisfaction about the care received (n = 51)

Variable	*M*	*SD*
Overall treatment satisfaction	2.68	0.62
Contact and treatment by staff	2.75	0.63
Expertise staff	2.80	0.70
Course of treatment	2.46	0.89
Receipt of information during care	2.73	0.57
Goal attainmenta	2.64	0.78
Report mark treatment satisfactionb	5.54	2.42

Note. Satisfaction scores range from 1 (poor) to 4 (good) and the report marks from 1 to 10. An overall mean satisfaction score ≥ 2.5 and report marks of 5,5 and higher are perceived as sufficient.
[a] n = 50. [b] n = 49.

The adolescents only just reported sufficient satisfaction regarding the care they received, indicated by the average report mark of 5,5. They were the least satisfied with regard to the course of treatment and the most satisfied about the expertise of staff. By applying the cut-off score for sufficient treatment satisfaction, 33 adolescents

(65%) could be perceived as satisfied and 18 adolescents (35%) as unsatisfied regarding the care received.

We found a significant difference between the dimensions of treatment satisfaction, $\chi^2(4) = 13.3$, $p = .01$. Post hoc analyses showed that the adolescents were significantly less satisfied about the course of treatment than the expertise of staff, $r = -.49$, $p = .000$, and the contact and treatment by staff, $r = -.43$, $p = .002$.

Client and care process factors associated with satisfaction

The results of the univariate analyses between client and care factors and treatment satisfaction are shown in Table 6.6.

Table 6.6
Correlations between adolescents' problems, adolescent-staff relationship and treatment satisfaction

		Client-staff relationship			
Outcome variable	Treatment motivation (n = 46) *r(s)*	Adolescent -coach (n = 50) *r(s)*	Coach-adolescent (n = 36) *r(s)*	Adolescent -mentor (n = 46) *r(s)*	Mentor-adolescent (n = 34) *r(s)*
Treatment satisfaction	.37*	.42**	.29†	.09	-.12
Contact and treatment	.32*	.38**	.29†	.08	-.06
Expertise staff	.47**	.24**	.28†	.16	-.16
Course of treatment	.23	.31*	.24	.07	-.23
Information during care	.23	.35*	.19	.03	-.08
Goal attainment	.46**	.44**	.24	-.04	.05

Note. Associations have been calculated by using Spearman's correlation coefficients. A positive correlation means that the higher the variable score, the higher the satisfaction score is. The client-staff relationships represent the same as in Table 6.3.
† $p \leq .10$. *$p \leq .05$. ** $p \leq .01$.

A higher motivation for treatment level at admission was significantly associated with more treatment satisfaction. A positive relationship with the coach was associated with more treatment satisfaction according to both the adolescents and coaches, but this did not apply to the relationship between adolescents and mentors. The Kruskal-Wallis test showed a significant difference between the low risk, individual risk, individual and family risk, and high risk group in terms of satisfaction about the course of treatment, $H(3) = 7.20$, $p = .07$. Post-hoc analyses with the Mann-Whitney test indicated no significant differences, but a trend for adolescents in the high risk group to be more satisfied about the course of treatment than adolescents in the individual risk group, $U = 5.0$, $r = -.64$, $p = .02$, and the individual and family risks group, $U = 10.5$, $r = -.53$, $p = .05$.

6.5 Conclusion

The first aim of the present study was to assess the outcomes of secure care in terms of change in the youths' behavior during care and satisfaction about the received care. We assumed that the secure care center would mainly intervene with the problem awareness, motivation for treatment and competence skills of the adolescents, because the social competency model (Durrant, 1993; Slot & Spanjaard, 1999) was considered to be the primary, underlying methodology of the care and treatment in the secure center. In contrast to our expectations, however, the results showed that the adolescents did not show significant changes in their competence skills from admission to departure according to group care workers.

Since research in residential youth care indicates that methods applied by care workers in their contact with clients differ from the methodology that should be used in theory (Andersson & Johansson, 2008; Harder et al., 2011), it might be that the social competency model in the center was less consistently applied in practice than in theory. This lack of program integrity might have caused the intervention not to intervene on the competence skills of the adolescents, as was expected beforehand. Research that specifically focused on the implementation of new methods in Dutch juvenile justice institutions supports this idea by showing that a good implementation of methods is difficult (Beenker & Bijl, 2003; Hendriksen-Favier, Place, & Van Wezep, 2010). Another explanation for the finding is that group care workers are critical in their assessment of adolescents' behavioral progress during care (cf.. Knorth et al., 2008), and therefore, did not observe significant changes in the adolescents' competence skills.

More consistent with our expectations is the finding that adolescents reported a significant, positive change in the preparation stage of motivation for treatment from admission to departure. This indicates that more adolescents were intending to take action in the near future (Prochaska, DiClemente, & Norcross, 1993). It confirms that motivation for treatment of adolescent can be developed during secure residential care (Van Binsbergen, 2003). However, it does not become clear how and why their motivation for treatment was improved. The transtheoretical model of change of Prochaska and Diclemente (1984), which was the basis for the instrument that we used, assumes that behavioral change occurs in a series of discrete stages, while little empirical support has been found for these stages of change (see Littell & Girvin, 2002). In other residential youth care studies, treatment motivation is defined as the motivation of young people to engage in treatment (Englebrecht et al., 2008; Smith, Duffee, Steinke, Huang, & Larkin, 2008) and this might be a more appropriate way of defining treatment motivation. However, treatment engagement is a construct that includes both the youths' attitude about treatment, participation in treatment and relationship with providers (Cunningham et al., 2009; Yatchmenoff, 2005), while

clients' willingness to participate and the client-staff relationship in treatment seem to be important, distinct constructs in association with outcomes (cf. Karver et al., 2006).

Overall, the adolescents' treatment satisfaction was only just sufficient. This indicates that it is necessary to make improvements in the secure residential care process. Considering the specific care aspects, adolescents were the least satisfied about the course of treatment and the goals and results that could be attained. This finding can be explained by the nature of the care they received, since these adolescents were often placed under coercion in the secured environment of the residential setting. Research has shown that young people who perceive there is a good reason for placement show higher levels of engagement in treatment than young people who do not perceive a good reason for placement (Englebrecht et al., 2008). In addition, almost all the adolescents in our sample had received other types of care prior to their admission to the secure care center, which makes that these young people are "experienced" in (residential) care and this might have influenced their expectations about care in a negative way (cf. Lodewijks, 2007). These findings point to the need for secure residential care settings to explicitly pay attention to the adolescents' perspectives regarding their placement and their previous care experiences. Furthermore, goal-oriented working and creating a perspective for these adolescents should be explicit aspects of care, because these are factors that can motivate young people for treatment (Klomp et al., 2004; Van Binsbergen, 2003).

We found with regard to the second aim of the present study that adolescents who reported to be better motivated for treatment at admission showed deterioration in their treatment motivation during their stay. This unexpected result might be explained by a possible ceiling effect for treatment motivation, which limits the amount of change that can be shown by the adolescents who were already motivated for treatment at the moment of admission, or by regression toward the mean due to error in the measure (Kazdin, 2003). Another possibility is that adolescents who were motivated at admission became less motivated due to a lack of perspective within the secure residential care context (see also the discussion in the previous section). Also in contrast to our expectations was the finding that the four risk groups which we found in a previous study within the present sample of adolescents (Harder et al., 2011) did not significantly differ in terms of achieved outcomes. This result can be explained by the lack of power to detect differences (see also the limitations discussed hereafter). On the other hand we did found, in line with our expectations, that a higher motivation for treatment level at admission was significantly associated with more treatment satisfaction.

Positive relationships with staff were, in contrast to our expectations, not associated with improvements in adolescents' motivation for treatment or competence. This can be explained by the fact that we found small changes with regard to motivation for treatment and no significant changes in competence from admission to departure. A positive relationship with the group care worker, but not

with the teacher, was associated with more treatment satisfaction according to both the adolescents and group care workers. For adolescents goal attainment was the most important care aspect that was associated with a positive relationship and this seems to be consistent with the finding of Holmqvist and colleagues (2007) that adolescents seem to prefer staff with a clear focus on work or tasks rather than staff without such a clear focus. We also found that a positive adolescent-staff relationship was related to adolescents' satisfaction with contact and treatment by staff and expertise of staff according to group care workers. This finding corresponds to results of other studies that treatment skills of staff, i.e. mainly interpersonal and direct influence skills, are important for achieving positive outcomes in youth treatment (Karver et al., 2006).

A limitation of the present study is that a part of the results is based on relatively small subsamples of adolescents due to attrition, especially with regard to questionnaires. Therefore, the results may not generalize to all adolescents in the population, because we have found indications that adolescents who completed questionnaires seem to function relatively better than adolescents who did not. The small subsamples and missing data also limited the analysis methods that could be applied. For example, we only used univariate analysis to examine the associations between independent and dependent variables. Since it is more desirable to apply analyses that include several variables in one model so that interaction effects can be detected, future research on this topic should include a larger study sample. In doing so, missing data might be prevented by using interviews rather than questionnaires with both adolescents and staff members in secure residential care.

Although our study has limitations, the results show that the adolescent's motivation for treatment can be improved during care and that the relationship with group care workers is important in association with treatment satisfaction of the adolescents. Since recent research suggests that changes in problem behavior trajectories during care function as important predictors for outcomes after the young people's departure from residential care (Lee et al., 2010), more in-depth research on the process of change for adolescents in secure residential youth care is needed. Within the context of residential care research, more attention should be paid to the experiences of adolescents during care so that it becomes clear which aspects can and should be improved (e.g., Abrams, 2006). Our results suggest that outcomes might be improved by a clear focus on adolescents' previous care experiences, perspectives of adolescents regarding their placement, goal-oriented activities and by creating a perspective for the adolescents during secure residential youth care.