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Improving family-centered care in Juvenile Justice Institutions

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Chapter 4

Determinants of parental participation in Family-centered Care in Juvenile Justice Institutions

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Abstract

This study assessed if staff members of two Juvenile Justice Institutions (JJIs) in the Netherlands were able to motivate parents to participate in a program of Family-centered Care. For research purposes, parents were considered to participate if they (A) attended the family meeting, (B) visited their son during regular visiting hours, and (C) participated in measurements. Study participants were the parents of 139 short-term detained male adolescents. The family meeting was attended by 47% of the parents, most adolescents (74.1%) were visited at least once by their parents, and 42% of the parents participated in measurements. Several factors influenced the parental participation rate variables, although effect sizes were small. The more parenting problems parents faced, the less likely they were to attend the family meeting. Parents with a job visited their son more often than unemployed parents. Finally, a longer stay of the adolescent and Dutch ethnicity predicted more parental participation in measurements. Our study showed that parental participation is feasible. However, the participation rates in the two years after the first steps of implementation were eligible for improvement. More implementation experience where staff could fully benefit from training and coaching in family-centered work could substantially increase parental participation rates.

Keywords: Juvenile offenders, adolescents, delinquency, youth detention centers, parental participation

Introduction

Involving parents in the care and treatment of their detained adolescent child is essential for achieving optimal treatment outcomes (Burke, Mulvey, Schubert, & Garbin, 2014; Keiley, 2007). Improving parental participation in programs offered by the juvenile detention center may have indirect positive effects on adolescents' recidivism. For example, a youth's intention to avoid delinquent behavior is associated with a higher sense of life control, which is established through frequent contact with family members (Forste, Clarke, & Bahr, 2011). Additionally, recidivism rates are lowered by improving family functioning (Lakin, Brambila, & Sigda, 2004; Tarolla, Wagner, Rabinowitz, & Tubman, 2002). Family communication improved when parents attended multi-family therapy groups (Dickerson & Crase, 2005).

Traditionally, treatment of delinquent adolescents in forensic settings was primarily focused on the youth, with the aim of protecting society and reducing recidivism. Accordingly, parents were kept at a distance and were hardly involved in interventions targeting their child. For a long time, this was standard practice in the Juvenile Justice Institutions (JJIs) in the Netherlands (Hendriksen-Favier, Place, & van Wezep, 2010; Sectordirectie Justitiële Jeugdinstellingen, 2011; Vlaardingerbroek, 2011). In response to the growing awareness that detained adolescents may benefit from programs allowing their parents to interact with their children and the institution, we developed a program for Family-centered Care (FC) in JJIs (Mos, Breuk, Simons, & Rigter, 2014; Simons et al., 2017). FC is an addition to the usual care and treatment interventions for youths in JJIs. In FC, parents are motivated to visit their child frequently, to be part of their child's daily life, to participate in their child's treatment interventions, to provide additional information about the youth and the family by filling out questionnaires, and to engage in family activities throughout the adolescent's stay. These family activities include but are not limited to parent evenings, cooking and dinner opportunities, tea ceremonies, celebrations, sport events, or movie nights. Parents are invited to the living group where their child is staying with nine other adolescents. These groups are supported and

monitored by JJI staff, so-called group workers (mostly social workers). One of them is assigned to an adolescent as a mentor. In FC, the mentor has regular contact with parents, at least weekly via telephone. Additionally, parents are invited for a family meeting in the third week of their child’s detention. The family meeting is a crucial initial step in our FC program, see Figure 1.

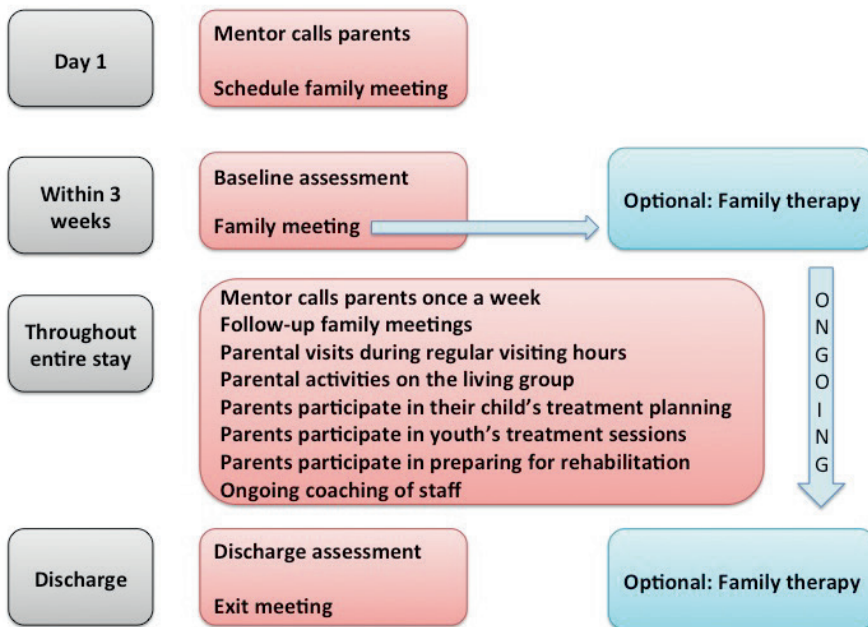


Figure 1. Content of the FC program.

In the family meeting, the principles of FC are explained. As FC is ingrained in all daily activities of staff members, all families are provided with FC. All parents are motivated to participate in activities as described in Figure 1. Following the family meeting, the psychologist assigned to the youth’s living group may decide that family therapy is indicated. In the latter case, FC includes the opportunity to start family therapy during detention, which may be continued after the adolescent is discharged from the JJI. The evidence-based family therapy offered in Dutch JJIs is either Multidimensional Family Therapy, MDFT (Liddle, Dakof, & Diamond, 1992; Mos, Jong,

Eltink, & Rigter, 2011; Rigter & Liddle, 2011), or Functional Family Therapy, FFT (nowadays labeled RGT in the Netherlands) (Alexander & Parsons, 1982; Spanjaard & Breuk, 2013). Family therapy is not a mandatory part of FC. We report here on FC, regardless of family therapy being part of it or not.

Although the FC program provides JJI staff members with clear instructions on how to motivate parents, the question remains to what extent FC is successful in motivating parents to participate. In the Netherlands, juvenile judges decide whether an adolescent is placed in a JJI, and parents do not have any say in this decision. The mandatory stay in JJIs is bound to negatively affect youth's treatment motivation (Roest, van der Helm, & Stams, 2016), and perhaps also the motivation of the parents to take part in FC. For example, parents may be slow to participate because they feel worn down after struggling with their child's problem behaviors prior to detention, or parents may have a sense of failure because they were not able to prevent their child from becoming entangled with the juvenile justice system (Burke et al., 2014).

To improve parental participation during their child's detention, information on factors that influence participation rates would be valuable. Knowing these factors, JJI staff members might be able to remove barriers and stimulate facilitating factors. Unfortunately, literature on parental participation during their child's detention is scarce. Therefore, we turned to the literature on other types of out-of-home residential care. In the Netherlands, two types of residential care exist besides JJIs: a) open, voluntary care, and b) closed care: usually involuntary yet by exception voluntary. Table 1 shows details of the settings and the population in terms of age, length of stays, and diagnosis of the retrieved studies on other types of residential care.

Table 1. Characteristics of studies on factors influencing parental participation in residential care.

Study	Setting	Age (years)		Length of stay	Diagnosis
		μ	SD		
Baker & Blacher (2002)	Residential treatment center	13.3	5.3	μ 10.5 years; Median = 5.8; Range = few months – 48 years	Axis 1: 26.41% Axis 2: 45.3% Dual diagnosis: 27.4%
Baker, Blacher, & Pfeiffer (1993)	Residential treatment center	14.2	3.2	Median = 15.7 years; SD = 13.5 years	Psychiatric disorder: 45.7% Mental retardation: 18.1% Dual diagnosis: 36.2%
Baker, Blacher, & Pfeiffer (1996)	Residential treatment center	23.1	5-72	Median = 2.2 years	Psychiatric disorder: 30.2% Mental retardation: 40.7% Dual diagnosis: 29.0%
Kruzich, Jivanjee, Robinson & Friesen (2003)	Residential treatment center, psychiatric hospital, psychiatric unit, group home	14.1	3.1	μ = 13.8 months; SD = 7.6 months	ADHD: 49% Bipolar disorder: 42% ODD: 40%
Robinson, Kruzich, Friesen, Jivanjee, & Pullman (2005)	Out-of-home treatment for emotional, behavioral, or mental disorders	15.9	3.4	μ = 13.8 months; SD = 7.6 months	ADHD: 49.0% Bipolar disorder: 42.2% ODD: 40.2%
Schwartz & Tsumi (2003)	Residential care for people with intellectual disabilities	23	8.1	Range = 2-9 years; Median = 4 years; Mode = 3 years	Mental retardation (ranging from profound – mild)
Sharrock, Dollard, Armstrong, Rohrer (2013)	Children’s residential psychiatric treatment center	< 17 years			Axis 1 diagnosis that excludes substance use disorders, mental retardation, and autism

In an earlier study of youths on short-term detention groups in JJIs, stays lasted for less than three months in 63% of the youths, less than one month in 37%, and less than two weeks in 24%. Youths on short-term detention groups were on average 17 years old and 44% had an IQ-score below 85 (Rovers, 2014). Although the other residential settings (e.g., residential treatment centers, psychiatric hospitals, group units) differ from that of JJIs in regard to the population and the legal framework, they are still out-of-home facilities which parents can visit, similar to JJIs.

The first factor influencing parental participation in residential treatment centers was the child's age. The younger the child, the larger the number of visits by their parents (Baker & Blacher, 2002; Robinson, Kruzich, Friesen, Jivanjee, & Pullman, 2005). A second factor was the duration of the stay of the child. The longer the stay, the fewer the number of parental visits (Baker & Blacher, 2002; Schwartz & Tsumi, 2003). Third, parents were more involved (phone calls, visits) if they expected the child to return back home after the residential stay (Baker, Blacher, & Pfeiffer, 1996). Fourth, conflicting work schedules of the parents hindered them from having contact with their child in residential care (Kruzich, Jivanjee, Robinson, & Friesen, 2003; Sharrock, Dollard, Armstrong, & Rohrer, 2013). Parents' educational level appeared to be unrelated to their level of contact with their child in residential care (Kruzich et al., 2003).

The literature is ambivalent as to the influence of ethnic background and marital status. While one study reported that children from white ethnic backgrounds had more involved parents (Baker, Blacher, & Pfeiffer, 1993), another study concluded that race was not related to the level of contact between parents and children during residential care (Kruzich et al., 2003). In two studies, parents with intact marriages were more involved with their residentially placed children (Baker et al., 1996; Robinson et al., 2005), but this was not confirmed in a third study (Kruzich et al., 2003).

The studies cited did not pertain to detained youths. We assume that factors influencing parental participation in residential care will also affect parental participation in juvenile

detention setting. We report here on the first study, from a broader research program, to examine the potential of parental participation in short-term detention groups in JJIs that recently started with the implementation of FC (Mos et al., 2014; Simons et al., 2017). Research questions were: What is the level of parental participation in a newly implemented FC program in the Netherlands? Which factors determine low or high rates of participation? If we understand which factors influence parental participation, JJI staff will be able to adjust their strategies to motivate parents.

Methods

Setting

Our study took place in three short-term stay groups in two JJIs in the Netherlands where FC was recently implemented. A juvenile judge can refer an adolescent to a short-term stay group in a JJI for pre-trial detention. Depending on the interim ruling of the juvenile judge, the time spent in pre-trial detention can last for a few days up to a maximum of customarily 90 days. As a rule, the juvenile judge refers the adolescent to a JJI close to the home of the youth. The JJI's secretarial office monitors a group's capacity and decides on which group the adolescent is placed. Because a JJI is required to fill free slots in the living groups when new adolescents are referred to the institution, the assignment of adolescents to groups is not solely dependent on characteristics of youths and is therefore without bias. The current study was part of a larger study on FC; the study protocol has been published (Simons et al., 2016). The data collection took place in the first two years after the FC program had been launched, between August 2012 and July 2014.

Procedure and assessments

Our assessments were embedded in the Routine Outcome Monitoring (ROM) and in the standard screening and diagnostic procedures in the JJIs. Baseline assessments took place in the third week of detention. Our research team assisted in scheduling assessments and interpreting the scores of the questionnaires so that the scores were usable in clinical practice. The assessments were carried out by trained research assistants or by trained students enrolled in a social sciences Master's program, under supervision of the first author.

Adolescents and parents were informed about the JJI's participation in scientific research projects by a flyer in set of the JJI's information leaflets. If respondents objected to the encoded usage of their information in scientific research, they were able to notify the research assistant, the youth's mentor in the living group, or the psychologist. In that case, their data were excluded from our study. The medical ethics board of the Leiden University Medical Center reviewed our study. The board ruled that our study fell outside the realm of the WMO (Dutch Medical Research in Human Subjects Act) and that it conforms to Dutch law, including ethical standards.

Participants

Because females were not placed in the two JJIs concerned, all adolescents in our study were males. An adolescent was not included (1) if his stay in the short-term stay group lasted less than 14 days; (2) if he did not have a parent or a parent figure; (3) if he already participated in our study during a previous stay; (4) if he and both parents did not understand Dutch; (5) if both he and his parents refused to take part in the assessments; (6) if he was already sentenced by the juvenile judge to a so-called PIJ order (Placement in an Institution for Juveniles for mandatory treatment which implies a stay of at least two years); or (7) if he was temporarily transferred from another institution.

The flowchart (Figure 2) below shows the number of included and excluded adolescents of the FC groups in our study. In total, 257 adolescents were assigned to the FC groups, and we excluded 118 of them. The final FC sample of 139 consisted of male adolescents aged 13 to 20 (mean 16.82; SD 1.05), and their parents. There was no significant age difference between the included and excluded adolescents ($t(239.87) = -1.86, p = 0.06$). On average, youth remained 66.6 days on the short-term detention group (range: 16-318, SD: 54.0). The majority of excluded adolescents stayed less than two weeks in the JJI. 'No reply' in the flowchart means that both youths and parents did not fill out the questionnaires. The category 'Other' refers to temporary transfers from another JJI, pre-existing so-called PIJ orders, not understanding Dutch, previous participation in our study, and missed assessments.

Parents of 58 adolescents (41.7%) completed the questionnaires at baseline ($n = 49$; 35.3%) and/or at discharge ($n = 20$; 14.4%). If two parents of one adolescent completed the questionnaire, we selected the data from the primary caregiver. If both parents were the primary caregivers ($n = 21$), we used the data of the biological mother ($n = 20$). If the biological mother did not complete the questionnaires, we used the data of the biological father ($n = 1$).

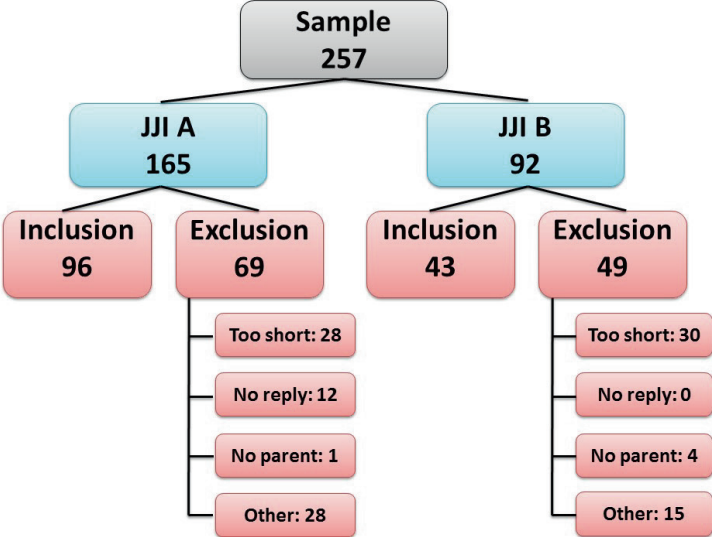


Figure 2. Flowchart showing the cases that were included in and excluded from the study.

Measures

Demographics

Demographic data were retrieved from the individual JJI database, the Routine Outcome Monitoring database for JJIs, and from a short additional questionnaire. Based on a review of literature on parental participation in residential treatment centers as discussed in the Introduction, we examined the influence of the following factors on parental participation: (1) age of the adolescent; (2) length of stay in the JJI; (3) living situation after short-term detention; (4) adolescent’s ethnicity; (5) parents’ marital status; (6) parents’ educational level; and (7) parents’ job status. For an overview of demographic characteristics, see Table 2.

Table 2. Demographic information on the sample studied.

Characteristic	Category	n (%)
Ethnicity youth (N = 139)	Dutch	20 (14.1)
	Morocco	36 (25.9)
	Turkey	18 (12.9)
	Surinam/Dutch Antilles	25 (18.0)
	Other	40 (28.8)
Living situation after short-term detention (n = 99)	With parents/other family members	58 (58.6)
	Elsewhere	41 (41.4)
Marital status parents (n = 137)	Married/living together	69 (50.4)
	Divorced/separated	58 (42.3)
	Parent deceased	10 (7.3)

Highest educational level	Elementary school	7 (15.2)
Parents (<i>n</i> = 46)	High school	14 (30.4)
	Lower vocational Education	10 (21.7)
	Bachelor/Master	9 (19.6)
	Other	6 (13.0)
	Having a job?	Yes
Parents (<i>n</i> = 48)	No	27 (56.3)

Family Environment

The Gezinsklimaatschaal (GKS) (Jansma & De Coole, 1996) is the Dutch version of the Family Environment Scale (FES) (Moos & Moos, 1994). The FES was used to assess family problems and was filled out by adolescents and their parents. The questionnaire consists of seven subscales: (1) *Cohesion* measures the degree of commitment, help, and support that family members provide for each other; (2) *Expressiveness* assesses the extent to which family members are encouraged to express their feelings and opinions directly; (3) *Conflict* measures the amount of openly expressed anger and conflict; (4) *Organization* assesses the importance of clear organization and structure in planning family activities and responsibilities; (5) *Control* measures how much set rules and procedures are used to run the family life; (6) *Moral standards* refers to the opinion of family members regarding norms and values; and (7) *Social orientation* assesses the involvement of family members with the social environment. Each subscale contains 11 items. Questions are answered with ‘yes’ or ‘no’.

Parenting Stress

The Parenting Stress Questionnaire (PSQ, in Dutch: OBVL) (Vermulst, Kroes, de Meyer, van Leeuwen, & Veerman, 2011) was administered to parents. The PSQ focuses on individual

characteristics of parents in relation to parenting and to the quality of the parent-child interaction. The questionnaire consists of 34 items to be scored on a four-point scale. The PSQ contains five subscales: (1) *Parent-child relationship* problems assesses the extent to which parents have positive feelings about their child; (2) *Parenting problems* assesses if parents feel confident about their parenting skills; (3) *Depressive moods* assesses the level of perceived personal inadequacy and feeling of dejection; (4) *Parent role restriction* measures the extent to which parents feel that the parenting role restricts their freedom; and (5) *Physical health problems* assesses self-perceived health of the parents .

Treatment motivation

The Adolescent Treatment Motivation Questionnaire (ATMQ) (van der Helm, Wissink, de Jongh, & Stams, 2013) was used to assess adolescents' general treatment motivation. The ATMQ consists of 11 items to be rated on a three-point scale, adding up to a total score. Treatment motivation scores below 21 were considered 'low', between 21 and 27 'average', and above 28 'high'.

We added three questions with a three-point scale to the ATMQ. These questions concerned the motivation of the adolescent to take part in family therapy during their stay and his motivation to continue individual and family therapy after leaving the JJI. Parents also filled out questions on their motivation to follow family therapy. We also asked parents if they felt that their son needed therapy during, and after detention.

Parental participation in FC activities

Assessing parental participation is challenging and could only be approximated. Although insight into some forms of contact between parent and their child (e.g. telephone contact) would be of great interest, practical reasons prevented us from gathering that information. After extensive discussion with JJI staff, we distinguished three types of parental participation that could be

monitored. Each type refers to an aspect of the FC program. The first indicator (proxy) of parental participation was parents attending the family meeting with their child's psychologist and his mentor. The second proxy of parental participation was the average number of times that parents visited their son per week during regular visiting hours. The third proxy was the willingness of parents to participate in ROM measurements (i.e., filling out questionnaires), which informs the process of treatment planning and treatment evaluation, which would benefit from the input by the parents. In other words, parents could influence treatment decisions by providing information (through questionnaires). Registration logs measured each category of parental participation.

Data analyses

The current paper uses data from the baseline assessment conducted within the first three weeks of the start of an adolescent's detention. We used descriptive analyses to assess family problems and treatment motivation. We disregarded the subscales of questionnaires with alphas < 0.7 . To compare family problems reported by adolescents and by parents on the FES, we used t-test. For comparing differences in motivation scores, we used Wilcoxon Signed-Rank Tests.

Additionally, we evaluated three proxies of parental participation: (A) attending the family meeting; (B) the number of visits per week during regular visiting hours; and (C) participation in measurements.

For each proxy, we first used single logistic (A and C) or linear (B) regression analyses to examine the bivariate relationship between the outcome variable (i.e., the three forms of parental participation) and the predictor variables (i.e. ethnicity and age of the adolescent, length of the adolescent's stay on the short-term detention group, expected living situation after the short-term detention group, parents' marital status, parents' education level, parents' job status, and the reliable subscales of the family questionnaires). We narrowed the number of

ethnicity categories down to two; Dutch ($n = 20$) versus other ($n = 119$). Next, predictors with a significant relationship with the outcome variable were combined in a logistic regression analysis to analyze the robustness of the relationship between the predictor and outcome variables for proxies A and C. For proxy B, we conducted a multiple regression analysis to analyze the robustness of the relationship between the predictors and outcome variable by controlling for other predictor variables. The predictor variables were simultaneously included in the regression analyses for all three proxies.

Results

Family problems

The FES was filled out by 40 parents and by 120 youths. For an overview of the reliable subscales ($\alpha > 0.7$) and the mean scores with the standard deviations, see Table 3. For FES subscales, a mean score of 50 is considered average and scores below 40 and above 60 deviant. On all subscales, parents and youths scored within the normal range. Youths scored significantly higher than parents on the subscales Cohesion ($t(36) = 3.1, p = 0.004$) and Organization ($t(37) = 3.8, p = 0.001$).

The PSQ was filled out by 47 parents. For an overview of the mean scores, the standard deviations, and the alphas for all subscales and for the total questionnaire, see Table 3. For almost all subscales, the mean scores indicated 'no problems'. The only subscale pointing to the presence of mild problems was 'Physical health'.

Table 3. Means, standard deviations and alphas per subscale of the FES and the PSQ.

Subscale	Mean	Standard deviation	α
FES Cohesion youth	57.5	7.5	0.76
FES Organization youth	59.6	7.8	0.78
FES Cohesion parents	51.7	9.1	0.79
FES Conflict parents	42.1	9.4	0.74
FES Organization parents	50.5	10.5	0.80
FES Moral Standards parents	54.0	8.2	0.77
PSQ Parent-child relationship problems	54.3	10.2	0.89
PSQ Parenting problems	53.9	13.3	0.83
PSQ Depressive mood	55.0	9.1	0.76
PSQ Parental role restriction	57.2	10.1	0.76
PSQ Physical health	60.4	10.1	0.86
PSQ Total parenting stress	55.2	12.8	0.90
ATMQ Total score	22.4	5.1	0.76

Treatment motivation

The total ATMQ score ($\alpha = 0.76$) of the ATMQ is categorized in low, average, or high treatment motivation. Among the adolescents ($n = 115$), 38.3% scored low on treatment motivation, 46.1% average, and 15.7% high. This implies that 61,8% of the adolescents who completed the questionnaire was at least somewhat interested in receiving therapy in general. Youth were divided in their opinion about family therapy during detention: they were either motivated or not, while only a small group was somewhat willing to participate (see Table 4). Motivation

decreased significantly when they were asked about family therapy after detention (Wilcoxon Signed-Rank Test $z = 374.5, p = 0.01$).

In general, parents were open to treatment for their child and to family therapy during and after detention (see Table 4). We did not find significant differences in parents' motivation during or after detention. When comparing motivation of youths with their parents, parents were significantly more willing to participate in family therapy during detention (Wilcoxon Signed-Rank Test $z = 369.5, p = 0.00$) and after detention (Wilcoxon Signed-Rank Test $z = 365.0, p = 0.00$).

Table 4. Distributions of scores on additional treatment motivation questions.

Additional motivation questions	No (<i>n</i> , %)	Somewhat (<i>n</i> , %)	Yes (<i>n</i> , %)
I feel that my son needs treatment during detention			
Parents (<i>n</i> = 52)	1, 1.9	8, 15.4	43, 82.7
I am willing to participate in family therapy during detention			
Youth (<i>n</i> = 136)	57, 41.9	23, 16.9	59, 41.2
Parents (<i>n</i> = 53)	2, 3.8	7, 13.2	44, 83.0
I feel that I(my son) need(s) treatment after detention			
Youth (<i>n</i> = 136)	55, 40.4	34, 25.0	47, 34.6
Parents (<i>n</i> = 44)	4, 9.1	5, 11.4	35, 79.5
I am willing to participate in family therapy after detention			
Youth (<i>n</i> = 136)	67, 49.3	29, 21.3	40, 29.4
Parents (<i>n</i> = 46)	3, 6.5	11, 23.9	32, 69.6

Proxy A: Predicting parents' attendance at the family meeting

The family meeting was attended by 47.1% ($n = 65$) of the parents. The only variables significantly related to parents' attendance at the family meeting were the length of the adolescent's stay and the subscale Parenting problems from the PSQ (see Table 5). Longer stays in the JJI were associated with more parental attendance at the family meeting. Additionally, more self-reported parenting problems were related to less attendance at the family meeting. Combining the two predictor variables in a logistic regression analysis, only parenting problems significantly predicted parents' attendance at the family meeting (see Table 5).

Table 5. Coefficients of the model predicting whether parents attend the family meeting.

Bivariate logistic regression analysis for parental attendance to the family meeting					
		95% CI for Odds Ratio			
	<i>b</i>	Lower	OR	Upper	<i>p</i>
Length of stay	0.02	1.007	1.016	1.024	0.000
Parenting problems	-0.07	0.87	0.93	0.99	0.026
Model A: Logistic regression analysis for parental attendance to the family meeting					
Constant	5.49		240.94		0.01
Length of stay	-0.002	0.985	0.998	1.01	0.77
Parenting problems	-0.075	0.869	0.928	0.99	0.02

Note. $-2LL = 46.92$, $R^2(\text{Cox \& Snell}) = 0.13$, $R^2(\text{Nagelkerke}) = 0.19$, Model $\chi^2(2) = 6.47$ $p = 0.04$

Proxy B. Number of parental visits per week during regular visiting hours

One quarter ($n = 36$; 25.9%) of the adolescents were never visited by their parents; 74.1% of the adolescents received at least one parental visit. Averaged per week across the whole sample, the adolescents received 0.57 visits from their parents each week (ranging from 0 to 2.33). The only predictor variable significantly associated with the weekly number of visits was parent's job status ($F(1,46) = 6.97$, $p < 0.05$, with a R^2 of 0.13). Parents with a job visited their child more

frequently (see Table 6). Because only one variable significantly predicted the number of visits per week, conducting a multiple regression analysis was pointless.

Table 6. Coefficients of linear regression analysis for parental job status and visits per week.

	<i>b</i>	<i>SE B</i>	<i>t</i>	95% CI for β		<i>p</i>
				<i>Lower</i>	<i>Upper</i>	
Parental job status	0.44	0.17	2.64	0.11	0.78	0.011

Proxy C. Participation in measurements

Parents of 41.7% of the adolescents completed questionnaires at baseline and/or at discharge ($n = 58$). Because our dependent variable here is whether parents participated in the measurements, we could not use questionnaire items as predictors in the regression analysis. Of the other predictor variables, two were significantly related to the degree in which parents participated in measurements (see Table 7). First, parents with a non-Dutch ethnic background were less likely to participate in measurements than parents with a Dutch background. Second, the longer the stay of the adolescent in the short-term stay group, the more parents participated in measurements. Combining the two predictor variables in a logistic regression analysis, parents' participation in measurements was best predicted by a model that included both the length of the adolescent's stay and his ethnicity, see Table 7.

Table 7. Coefficients of the model predicting whether parents fill out questionnaires.

Bivariate logistic regression analysis for parents participating in measurements					
		95% CI for Odds Ratio			
	<i>b</i>	Lower	OR	Upper	<i>p</i>
Length of stay	0.01	1.002	1.009	1.016	0.016
Child's ethnicity	-1.12	0.122	0.33	0.882	0.027
Model C: Logistic regression analysis for parents participating in measurements					
Constant	0.10		1.11		0.84
Length of stay	0.01	1.002	1.01	1.017	0.009
Child's ethnicity	-1.27	0.102	0.28	0.775	0.014

Note. -2LL = 176.5, R^2 (Cox & Snell) = 0.09, R^2 (Nagelkerke) = 0.12, Model χ^2 (2) = 12.38 p = 0.02

Discussion

Family-centered Care aims to increase parental participation in activities, interventions, and procedures during an adolescent's detention to achieve better treatment outcomes.

Consequently, we examined the level of parental participation in FC activities during the first two years after its launch in short-term detention groups in JJs in the Netherlands. We used three proxies to measure the level of parental participation in FC: (a) whether parents attended the family meeting, (b) the number of times the parents visited their son during regular visiting hours, and (c) the extent to which parents participated in measurements deemed to be important for planning adequate interventions for the adolescent.

This study showed that most parents of detained youths were willing to participate in FC. Roughly half of the parents attended the family meeting; two in five parents participated in measurements. Three in four adolescents were visited by parents, on average once per two weeks. This level of parental participation is promising, considering that FC was implemented in a closed setting that was traditionally concerned with protecting the society instead of providing care and treatment. Parents were previously kept at distance, and adolescents in JJs have

complex and severe psychological problems with a lack of treatment motivation (Colins, 2016; Roest et al., 2016; Sectordirectie Justitiële Jeugdinstellingen, 2011; Vlaardingerbroek, 2011). However, our study similarly showed that almost 26% of the youth did not receive any visits from their parents during visiting hours. This implies that although the FC program is able to successfully reach a substantial number of parents and motivate them to be involved, parental participation rates remain an area of concern. This conclusion is not surprising considering that our data collection took place immediately after the first steps of implementing FC.

Implementing a new intervention in practice is difficult and takes time (Bekkema, Wiefferink, & Mikolajczak, 2008). This especially applies to family-focused interventions for youth with antisocial behavioral problems (Stern & Smith, 1999). Implementing FC implies training of staff members, to be followed by ongoing coaching and booster sessions (Simons et al., 2017). To study the effects of FC, more time is required to fully implement the program, and to ensure that staff optimally benefit from training and coaching in family-centered work. Implementation success is related to the socio-political context and to the organizational context, amongst other things (Bekkema et al., 2008). In this light, we must consider that at the time of implementing FC, the Dutch field of youth care was facing drastic transitions, and the JJs themselves were confronted with budget cuts, high rates of sickness among staff, and high staff turnover (Janssens, 2016; Ministerie van Veiligheid en Justitie, 2017; Rovers, 2014; van Alphen, Drost, & Jongebreur, 2015). Lack of resources for staff at times of financial uncertainty is considered an additional complication for family participation (Barth, 2005).

Actively engaging families in interventions for youth is an ongoing challenge (Herman et al., 2011). The level of parental participation might be improved when staff members start to understand which factors influence parents' participation. Therefore, we performed prediction analyses to assess which factors influence the different types of parental participation.

First, our data show that parental attendance at the family meeting was predicted by the level of parenting problems; feeling less skilled in parenting their child was related to low

attendance. This finding, implying that parents who feel overwhelmed were less likely to attend, is in line with a previous finding that parents were less involved during their child's detention when they feel low on energy (Burke et al., 2014). Based on our results, we suggest that JJI staff assess parenting problems at the beginning of their child's detention, and, if parents experience these, to be very attentive to these problems and to first offer them help. Parents might be more motivated to attend the family meeting if they understand that the JJI offers family therapy, which would help in decreasing parenting problems. Therefore, it is important that staff members inform parents about this opportunity from the beginning of their child's detention. Additionally, home visits might be considered to serve as a link between family life at home and the adolescent's life in the JJI. Through home visits, JJI staff show that parents are worthy of their time and effort and that the JJI takes initiative to collaborate with parents. When a family meeting starts at home with only the parents, it might be easier to motivate parents to continue the meeting in the JJI so that their child is able to attend as well.

Second, the number of visits per week from parents was predicted by parents' job status; having a job was related to more visits. Although having a job would suggest that parents have less free time to visit the adolescent, they perhaps could visit their child more often because they could pay for the trips. In line with this financial interpretation is the earlier finding that parents are more involved in family interventions if they are provided with transportation (Kumpfer & Alvarado, 1998). Parents with a higher socioeconomic status were more involved with their residentially placed children than other parents (Baker et al., 1993). We suggest further research to investigate whether the predictive value of parental job status on visits is mediated by the financial and/or transportation situation of parents. If this turns out to be the case, JJIs might consider providing parents with travel allowances and with transportation support, e.g. by shuttle bus, or to make home visits to establish a better working relationship with parents.

Finally, participation in measurements was predicted by the adolescent's ethnicity and the length of their stay; longer stays and Dutch ethnic nationality were associated with more parental participation in measurements. Our finding that longer stays were related to more participation is surprising, given that previous research showed the contrary (Baker & Blacher, 2002; Schwartz & Tsumi, 2003). This difference in findings is possibly explained by the fact that our study took place among detained adolescents with relatively short stays, while the other studies took place in residential facilities where participants stayed for much longer periods, up to 48 years. Our finding in regards to ethnicity might be explained by the fact that the questionnaires were in the Dutch language. It is often easier to fill out questionnaires in one's mother language. Additionally, previous research showed that culture could affect language interpretation (McCoy, 2014). JJIs are encouraged to provide parents with questionnaires in their mother language or to provide assistance to parents when filling out questionnaires to avoid language interpretation problems.

A surprising finding in our study was that adolescents and their parents reported very few problems within the family. The only subscale, on which parents scored in the range of mild problems, was 'Physical health'. Sometimes, psychological distress is manifested by the presentation of physical symptoms. This phenomenon is referred to as somatization. Since somatization was shown to be correlated with antisocial behavior within individuals and across generations (Frick, Kuper, Silverthorn, & Cotfer, 1995), it is not surprising that the parents of the troubled adolescents in our sample experienced physical health problems. While the other low problem scores could possibly indicate that the respondents truly do not experience problems within family functioning, low scores are not uncommon for this population. Adolescents in conflict with the justice system are prone to deny problems and questions have been raised about the usefulness of self-report within this population (Butler, Mackay, & Dickens, 1995). More surprising is the finding that while parents and youth reported few family problems, they

did report treatment motivation, including motivation for family therapy. This raises the question why they would be motivated for family therapy, when there are presumably no problems within that area. Are family problems underreported, and does the presence of treatment motivation for family therapy show that problems do at least covertly exist? Or is there another explanation for these findings? We suggest studying this seeming contradiction through qualitative research. Our finding that adolescents were more motivated for family therapy at the beginning of their detention emphasizes the need to start early in the process. Parents are also a good starting point for family therapy, as they were more motivated than their sons. Starting family therapy early during detention might be beneficial during the rehabilitation process since a good working relationship is considered protective against attrition (Sharf, Primavera, & Diener, 2010).

Moving on from reflecting on the results of our study, these results should be interpreted considering some limitations. The sample size was small, and the strengths of our prospective relationships were weak. Therefore, our results need to be interpreted with caution. We suggest future research to conduct similar analyses with a larger sample size and to strive for more equal distributions of participants among the categories of predictor variables, e.g., with regard to ethnicity or in regards to family types. Additionally, we suggest future research on parental participation during their child's detention to include other factors such as type of adolescents' offenses, socio-economic situation, or distance to the JJI. Moreover, future research would benefit from including more forms of parental participation in their analyses. Although we chose to assess three types of parental participation, these three types do not cover the whole spectrum. Additionally, as the current study did not assess predictors for families' participation in family therapy, that would be an interesting topic for future research. This knowledge might advance the process from indication up to the actual start of the family therapy. Finally, a qualitative study on which factors parents consider to influence their

participation might increase our understanding of why some parents do participate, while others do not. This information might help JJI staff members motivate parents to participate. Interviews with parents also provides the opportunity to learn in which ways parents would like to be involved during their child's detention and in which activities they would be interested to participate. In this way, a qualitative study would have the potential to improve the FC program. Based on the findings of the current study, the FC program could also be improved by assessing parenting problems as experienced by the parents more thoroughly at the beginning of detention, by paying home visits if parents do not visit the JJI, by matching parents to mentors who are able to converse in parents' mother language, and by directing unemployed parents to social workers outside of the JJI to support them in finding a job if desired.

