Children Come First: Program Evaluation Report

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I. INTRODUCTION

This report is to provide summary findings on the effectiveness of Children Come First initiative program. As described in the contract, the main goal of this project is to identify factors that contribute to successful outcomes for children enrolled in the Children Come First initiative. Two outcomes measures were evaluated in this study: Child and Adolescent Functional Assessment (CAFAS) score and Restrictiveness of Living Environment Scale (ROLS) scores. The contributing factors or predictors of these outcome variables are from five domains – demographics of children enrolled, diagnoses of children, program factors, service utilization factors, and other factors, and detailed variables from each domain were analyzed to investigate how and to what extent they have impacts on CAFAS and ROLS scores.

Including the introduction, this report consists of five parts. In the next section are descriptive characteristics of children enrolled in CCF programs. Along with demographic backgrounds of children, descriptive statistics on service and program factors are summarized. The third and fourth parts of the report discuss factors associated with CAFAS scores, and factors associated with ROLS scores. The last part includes summary and discussions.

II. Characteristics of Children Enrolled in CCF initiative.

There are two main sources of data for this study. The main data file includes both outcome measures and all predictive factors except service utilization (Children Come First - Placement Study Data 3.21.2004.xls). The second data files are a series of files of service utilization, from 2001 to 2004.

2.1. Overall Characteristics

There were 611 children in the study data set, who have been enrolled in two service

providers: Achieving Reintegration Through Teamwork (ARTT) and Community Partnerships.

The descriptive statistics of children are presented at Table 2.1. About two-thirds (409) were

males and one-third (202) females. A little more than a half (323) were Whites, one-third (207)

Blacks, and the rest (81) were other race/ethnic groups. Racial composition was not statistically

different between male and female children.

The average age at the time of enrollment (first enrollment for the children with multiple

program enrollments) was 13.2 years old, ranging from 4 to 17, and the mean age at the time of

enrollment was statistically higher for female children than male children (13.6 vs. 13.0). White

children were older than children of the other two race/ethnic groups when they were enrolled in

the program. The average length of enrollment was 15.5 months, ranging from 1 month to 52

months. There was no difference in the length of enrollment between male and female children,

or among different race/ethnic groups.

More than 90 percent of children (563) were enrolled in just one of the two service

providers, but there were 48 children who were enrolled in both providers during the study

period. Gender and race/ethnicity composition were not statistically different between those who

were enrolled in a single program and those enrolled in both providers. Children who have been

enrolled in both service providers started programs earlier than those enrolled in one provider

(11.0 vs. 13.4 years old), but there was no difference in length of enrollment between the two.

About one-fourth of children (141) had a diagnosis of oppositional defiant/conduct

disorders (DSM-IV codes of 313.81, 312.81, 312.82, and 312.87, ODD/CD hereafter). There

were no gender or race/ethnicity differences between those who had ODD/CD and those not.

Further, the two groups – children with ODD/CD and without disorder – were not significantly

different with regard to age at the time of enrollment and the length of enrollment.

As mentioned earlier, there were two service providers for CCF Initiative: ARTT and Community Partnerships. When children who were enrolled in both service providers were counted twice, about two-thirds (460) have been in Community Partnerships, and a little less than one-third (200) in ARTT. The comparison of characteristics of children in each service provider is presented at Table 2.2. There was no significant difference in racial and gender composition of children between the two programs. On average, children in ARTT were older than those in Community Partnerships when they were enrolled in the program (14.0 vs. 12.8 years old). In contrast, children in Community Partnerships have been in the program longer than those in ARTT (16.4 vs. 13.7 months).

2.2. Service Utilizations.

There were 448 children for whom their service utilization records by the end of their program enrollment were available. From the list of service modifiers, nine service groups were identified based on the common characteristics of services: placement services, psychiatric evaluation services, counseling and therapy services, in home services, day treatment services, mentoring services, supervision services, transportation services, and other services. Table 2.3 presents the average number of each service category children in CCF Initiative received overall, along with minimum and maximum number of services. In addition to placement services, "counseling and therapy services" and "other services" were most common service types children received. For most services, children who received a service were younger at the time of program enrollment, and they had been in the program longer than those had not received a service. The only exception was the supervision services and children who received any type of supervision services were older when they were enrolled in programs.

Of particular interest among these services is "out of home placement" service.[1] General

profile of those who received placement service has been one of the main research questions.

The average number of total placement services children received was 3.1 (ranging from 0 to

31), and the average number of unique placement services was 1.7, ranging 0 to 6. Overall, 371

children received at least one type of "out of home placement" services. Table 2.4 shows the

comparison between those who received placement services and who did not. While there was

no gender difference in placement service utilization, there was a significant difference among

race/ethnicity groups such that the percentage of receiving placement services was higher among

Black children. The mean age and the age at the time of enrollment were not statistically

different between the two groups, but like most of other services, children who received

placement services have been enrolled in the program longer (16.0 vs. 14.3 months).

III. Factors associated with CAFAS scores.

For CAFAS and ROLS score analyses, children who have been enrolled in more than one

service provider were considered as a separate subject. Thus, the total number of cases in the

following analyses was 660, of whom more than two-third (460 or 69.7%) was enrolled in

Community Partnerships, and the other 200 (30.7%) were in ARTT.

While CAFAS was possibly assessed up to seven times, for most children CAFAS was

assessed five times - intake, 6 months, in the first year, in the second year and prior to

disenrollment -, and very few were assessed in 3rd (12 out of 660) and 4th year (1 out of 660).

There were 418 children for whom both the intake CAFAS score and the last CAFAS score were

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[1] Out of home placement service modifiers includes following services: Treatment Foster
Care, Residential Care Center (CCI), Residential Care Center (Type II), Psychiatric
Hospitalizations, AODA Hospitalizations, Forster Home Care, Group Home Care, Respite, and
Corrections.

available, and they were included in the analyses.

3.1. Race, Gender, Program Factors and CAFAS.

First, a series of t-tests and ANOVA's were carried out to see if there were statistically significant differences in CAFAS scores (initial, 6 month, 1st, and 2nd year scores) between groups with different characteristics. The results indicated that at each point of the test, the mean CAFAS scores were not statistically significant different with regard to gender, race (white, black, and others), and program types (ARTT vs. Community Partnerships). Also, there was no difference in the mean CAFAS scores between those who had ODD/CD and who did not, and scores were not different between young children (age 0 to 11 years old) and older children (age 12 to 17 years old) at the time of enrollment.

Second, CAFAS severity classifications were used to examine how the severity of functional impairment of children has changed over time, from the initial intake test to the final test. Table 3.1 presents the cross-tabulation of intake and final test score severity classifications. Generally speaking, there seemed to be vast improvement in CAFAS scores. At intake test, 70 percent of children were classified as either "marked" or "severe." At the final test, however, the percentage of children classified as either "marked" or "severe" decreased to 32 percent. In detail, about two-thirds of children (269, or 64.4%, numbers below the diagonal cells) have shown improved in functional impairment, i.e., less severe at the final test than the intake test, whereas only 11% (46) of children have gotten more severe in functional impairment (numbers above the diagonal cells). The rest (103, or 24.6%) remained at the same severity level (numbers in the diagonal cells).

Next, multiple regression analysis and ANCOVA's (Analysis of Covariance) were performed to examine which factors were significantly associated with the CAFAS. Because of

many missing cases in the placement service variable, the total number of cases reduced to 353 for the analyses. The final CAFAS score was a dependent variable, and the intake CAFAS score was included in the model to account for the initial differences in functional impairment among children. Other factors included the analyses as predictors of CAFAS were gender, race/ethnicity, program types, age at the time of enrollment, the length of enrollment, the number of placement services, and diagnosis of opposition defiant/conduct disorders. Additionally, interaction terms of these variables were included in the analytic models to explore if the impacts of the predictors on CAFAS scores vary along with levels of other predictors.

The results of both analyses showed that in addition to the intake scores of CAFAS, factors such as the number of placement services, children having ODD/CD and the type of service provider programs were significantly related to the final CAFAS scores. The result of regression analysis is presented in Table 3.2. With other conditions being equal, children with ODD/CD scored lower in the final CAFAS scores than those did not have the disorder. Also, those who received a greater number of placement services were more likely to score high in the final CAFAS.

The significant interaction effects between program types and race/ethnicity suggested that the program effects were different across different race/ethnic groups of children. The interaction effects were further examined and results are presented at Table 3.3. For Community Partnerships program, the extent to which children improved in the CAFAS outcome (lowered scores) was similar across three race/ethnicity groups, about 25 to 27 point decrease on average. However, in ARTT, the average CAFAS score for White children decreased most (34.3 point) whereas for the Black and Other racial groups, the decreases in CAFAS scores were less than 20 points (18.4 for Black group and 13.3 point for Others). This result suggested that ARTT has

been most effective for White children, and Community Partnerships was equally effective for children with any racial backgrounds. Figure 3.1 is a graphic illustration of this interaction. Whereas the intake CAFAS scores were similar across race/ethnic groups in both programs, White children in ARTT scores the lowest in the final CAFAS, especially in contrast to children in other racial groups in ARTT.

In a similar way, the interaction between gender and diagnosis of ODD/CD is described at Table 3.4. The largest difference between the intake and final CAFAS score was observed among male children with ODD/CD (32.0 point). For female children or non ODD/CD male children, the average decrease in CAFAS scores were around 25 points. Hence, it appeared that male children with ODD/CD have improved most in CAFAS scores during the program enrollment period. A graphical example of this interaction effects is presented at Figure 3.2.

3.2. Service Utilization and CAFAS.

Another important study question to explore was to what extent and how service utilization affected successful outcomes for the children in CCF. Here, the number of services children received during the enrollment and each type of service were analyzed as important domains of service utilization. The correlation analysis was performed to investigate the relationship between the number and types of services children received and CAFAS scores. When the impact of initial (intake) CAFAS score on the final score, only the number of "out of home placement service" was significantly related to CAFAS final score (correlation = .129). Besides placement service, there was no meaningful relationship observed between the number of services children received during the program enrollment and CAFAS scores.[2] However,

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[2] Because none of the number of services variables was significantly associated with the final CAFAS scores except for placement service, these service variables were not included in the regression analysis reported in the earlier section to make the analytic model more

when examined separately, there were services that were associated with lowered CAFAS over

time – psychiatric evaluation services,[3] in-home service,[4] and day treatment services.[5] For these

services, there was larger decrease in CAFAS scores among children who received the service

than those who did not. Table 3.5 presents a summary of this findings. On average, children

who received either psychiatric evaluation services or in-home services scored about 30 points

lower in their final CAFAS compared to their initial scores. In contrast, for those who did not

use/receive these services, the average decrease in the CAFAS score was about 25 points.

Further, there was a significant race effect among those who received day treatment

services. The CAFAS score dropped most for White children who received the service (33.4

points on average). For Black children and children with other race/ethnic backgrounds, their

average CAFAS scores decreased least (15.5 points). In fact, for non-White children, those who

did not received the service improved more (i.e., larger decrease in the CAFAS scores) than

those who received the service (the average decline of the CAFAS score among children not

receiving the service was about 27 points).

This result suggested that the day treatment service was effective for White children, but

not much for minority children. In fact, for minority children, not receiving day treatment

service seemed more beneficial than receiving services. One possible explanation for this

seemingly paradoxical result might be that for non-White children who received the day

treatment service, their initial scores were lower than the initial scores of those not receiving the

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parsimonious.
   [3] This includes "Psychiatric Medication Review" (modifier# 050) and "Psychiatric
Evaluation" (evaluation, diagnosis, & treatment recommendation, modifier# 181).
   [4] This includes "In-Home Lead Team" (modifier# 160) and "In-Home Case Aide"
(modifier# 161).
   [5] This includes "Day Treatment" (modifier# 172), "AODA Day service" (modifier# 173),
and "specialized Child Day Treatment" (modifier# 174).

service (69.7 vs. 77.4 for Blacks, and 73.6 vs. 82.2 for children with other racial/ethnic background). Since their initial scores were low, the difference between initial and final CAFAS scores for these children were bound to be small (assuming that their final CAFAS score was close to the overall mean, which was 53.1 point). Further, for other race/ethnicity groups, there were not enough children who received day treatment service to make any conclusive statement regarding the effectiveness of the service. To understand this unexpected finding better, further investigation with more information about service utilization would be required.

IV. Factors associated with ROLS scores.

Like CAFAS scores, ROLS were measured up to six times for the children; 6 month prior to the enrollment of the program, in 1st six month, in a year, in a year and half, in the two years, and in two and a half years. There were few children (38 out of 660) who were assessed at two and a half years. With the small number of children with the last ROLS scores, the t-tests comparing the mean scores between different characteristics were done with the first five ROLS scores.

4.1. Race, Gender, Program Factors and ROLS.

The results of t-tests showed that while mean ROLS scores were not statistically different between males and females, the scores were significantly different between different racial groups. For most ROLS scores, non-White children scored higher than Whites, and especially Black children scored higher than both Whites and other racial/ethnic groups. Also, ROLS scores were consistently higher for children enrolled in ARTT than those in Community Partnerships. While there was no difference in ROLS scores between those who were diagnosed as ODD/CD and those were not, the mean scores of ROLS were higher for children who were

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older at the time of enrollment (aged 12 to 17 vs. 0 to 11).

To identify factors that contribute to lowering ROLS scores, ANCOVA and multiple regression analysis were done.[6] The result of regression analysis is presented at Table 4.1. Many factors had significant impacts on final ROLS scores even after the effect of the initial ROLS score, which was measured in the first 6 month during the program enrollment, was taken into account.

Age at the time of enrollment was positively associated with ROLS scores, implying that the final ROLS scores tended to be higher for children who were enrolled in the program when they were older. As will be discussed later, this result was mainly due to the fact that children in ARTT were older than those in Community Partnerships at the time of enrollment, and those in ARTT by design would have higher ROLS scores.

There was a significant interaction effect between gender and the length of enrollment on the final ROLS scores. For male children, the length of enrollment appeared not to be related to the ROLS scores. In contrast, the length of enrollment was a positive predictor of ROLS for female children. The longer they were enrolled in the program, the higher the ROLS scores for female students. This was a somewhat unexpected result, but one possibility was that those with higher ROLS scores (living in more restricted living environment) tended to remain in the program longer. However, why this was observed only among female children could not be explained with this. More detailed analysis may be required to further probe this.

Another significant interaction effects on ROLS was observed between the program types

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[6] In the regression analysis, the number of placement service variable was excluded from the analytic model as a predictor to avoid possible redundancy in the measure of predictor and outcome variables. Without the number of placement services, the valid number of children used in the analyses was 601. Except for the number of placement services children received, the same set of variables in CAFAS score analyses were used as predictors.

and race, suggesting that the program effects were different along with the race/ethnicity of children. As seen at the Table 4.2, the differences between the final and initial ROLS scores were comparatively similar across three race/ethnic groups for Community Partnerships (-.11 to -.27) with the difference among Black children the smallest. In contrast, the difference scores of ROLS among children enrolled in ARTT varied more with race/ethnicity, ranging from -.77 to -1.05. Further, unlike those in Community Partnerships, the difference in ROLS scores was the largest for Black children. Shown in Figure 4.1 is a graphic description of this interaction effects. Altogether, these findings suggested that improvement in the ROLS scores was more evident among youth in ARTT than Community Partnerships, and further, ARTT worked best for Black children.

4.2. Service Utilization and ROLS.

Similar to the CAFAS analysis, two domains of service utilization - the number of services children received during the enrollment and each type of service - were analyzed in relation with ROLS scores. The correlation analysis showed that among the nine different types of services, only the number of "out of home placement service" was significantly related to ROLS final score (correlation = .361). This high correlation between the number of placement service received and the final ROLS score was expected because the ROLS score itself included many placement service settings specified in "out of home placement modifiers." Results of follow-up regression analyses showed that neither the total number of services nor the number of each service children received was a significant predictor of the ROLS score.

The analysis of each type of service yielded the same result and none of each service was statistically meaningfully related with a change in ROLS scores over time, especially when the

effects of service provider (or programs) was taken into account.[7] This result might be due to the fact that the main source of difference in ROLS scores was the type of service providers: to be enrolled in ARTT, children must be in a residential care center, resulting in higher ROLS score for those in ARTT. Once this difference was accounted for, it seemed that there was not much difference in ROLS scores that could be attributed to the service utilization.

V. Summary and Discussions.

In this report, factors that were associated with successful outcomes for children enrolled in the Children Come First initiative were reviewed. The successful outcomes were measured by decline in CAFAS (Child and Adolescent Functional Assessment) scores and ROLS (Restrictiveness of Living Environment Scale) scores over the period of program enrollment.

As for CAFAS, there was overall improvement in functional impairment of children in CCF initiative. While the percentage of the severely impaired decreased from 38.5% to 12.7%, the percentage of the mildly impaired increased from 3.8% to 32.8%. In total, about two-thirds of youth in CCF initiative have shown improvement in functional impairment (i.e., decrease in CAFAS scores). Results of detailed analyses showed that factors such as program types, race/ethnicity of children, and gender of children were intertwined one-way or another in affecting the change in CAFAS scores over time.

There are two service providers in CCF initiative: ARTT (Achieving Reintegration Through Teamwork) and Community Partnerships. The findings suggested that the effectiveness of each program varied with race/ethnicity of youth in the program. Community Partnerships program appeared to be equally effective across three different racial/ethnic groups: Whites,

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[7] Again, because of redundancy in the measure of the ROLS score and out of home placement service, the placement service utilization was excluded from this part of analysis.

Blacks, and others. In contrast, ARTT program appeared to work best for White children (manifested by the largest drop in CAFAS score between an initial test and the final test), but it was not as much effective for children with other racial/ethnic backgrounds.

While there was no overt gender difference in CAFAS scores, gender effects were linked to the diagnosis of oppositional defiant/conduct disorder. Compared to other groups, male children with ODD/CD showed most improvement in functional impairment over time. There might be some elements in the program services that were conducive for the functionality of male children suffering from ODD/CD.

As for ROLS scores, age at the time of enrollment as well as program type were among important predictor of the final ROLS scores. These findings were expected considering the different characteristics of two programs – ARTT and Community Partnerships. As mentioned earlier, children in ARTT must be in the residential care center to be enrolled, whereas most children enrolled in Community Partnerships were in the community – at home, living with relatives, in a foster home, or group home, etc. Consequently, children in ARTT tended to be older at the time of enrollment, and would have higher ROLS scores. It appeared that this difference of the programs was shown up in the positive association between age at enrollment and the ROLS score.

Further, like CAFAS, the program type and race/ethnicity of youth were interconnected with each other in having impacts on ROLS scores. However, the nature of this interaction was somewhat different from what was found with CAFAS. While ARTT program seemed most beneficial for White children in terms of lowered CAFAS scores (Figure 3.1), it was Black children in ARTT program who had the largest drop in the ROLS scores (Figure 4.1). In contrast, although not statistically significant, there was an indication that Community

Partnerships was more effective for White children than Black children in terms of lowered

ROLS scores.

Various types of service that children in CCF initiative received were examined in terms

of their association with CAFAS and ROLS scores. Of nine services studied, three service types

were found to have beneficial effects on CAFAS scores: psychiatric evaluation service, in-home

service, and day treatment service. Compared to those who did not receive these services,

children who received these services showed a greater amount of decrease in CAFAS scores, i.e.,

improvement in the level of functional impairment. Particularly, the day treatment service

appeared most beneficial for White children who were more severely impaired. As far as

analyses done in this report were concerned, however, the service utilization had no impact on

the ROLS score. As discussed in the previous section, the lack of effects of service type on

ROLS scores might be due to that the difference in ROLS scores among children was mostly

attributable to the intrinsic difference in ROLS scores between ARTT and Community

Partnerships.

Together, these findings suggest that each program and service type may have unique

features that fit and benefit differentially for children with different configurations of

demographic and other factors. When these unique merits are well utilized, it will help make the

programs and services more effective to improve the overall well-ness of children in the

program.

Another issue to discuss is related to the outcome measures. Compared to the CAFAS

score, it appeared that the ROLS score was somewhat limited as a measure of successful

outcome for the children in the programs. It was closely related to many service types,

especially with the out of home placement service. As a result, placement service could not be

considered as primary predictors of ROLS. Also, the program differences in ROLS scores made it hard to probe the relationship between other factors and ROLS scores. If there were other outcome measures available such as history of law enforcement violation, and/or school attendance record, analyses with those measures would have been a good complement to the current study, helping expand the scope of the analyses done here, and strengthen the findings.

Table 2.1. Descriptive Statistics of Children Enrolled in CCF initiative.[a]

		Age at the time of enrollment	Average length of enrollment (in months)
Total (n=611)		13.2 (2.4)	15.5 (8.3)
Gender			
Male	409 (66.9%)	13.0 (2.7)	15.6 (8.0)
Female	202 (33.1%)	13.6 (2.0)**	15.5 (8.8)
Race/Ethnicity			
White	323 (52.9%)	13.5 (2.3)*	15.2 (7.2)
Black	207 (33.9%)	12.9 (2.5)	16.2 (9.6)
Others	81 (13.2%)	12.7 (2.7)	15.1 (8.7)
Enrolled in one/both programs			
One program	563 (92.1%)	13.4 (2.4)*	15.5 (8.4)
Both programs	48 (7.9%)	11.0 (2.5)	16.3 (6.3)
ODD/CD			
Yes	141 (23.1%)	13.3 (2.5)	15.2 (8.0)
No	470 (76.9%)	12.8 (2.5)	16.6 (9.1)

* p < .05; ** p < .01; *** p < .001;

Note.

a. Mean with standard deviation in the parenthesis.

Table 2.2. Descriptive Statistics of Children by Service Providers.

	Service Providers	
	Comm. Partnerships (n=460)	ARTT (n=200)
Gender		
Male	306 (66.5%)	138 (69.0%)
Female	154 (33.5%)	62 (31.0%)
Race/Ethnicity		
White	250 (54.3%)	96 (48.0%)
Black	148 (32.2%)	74 (37.0%)*
Others	62 (13.5%)	30 (15.0%)
Age at the time of enrollment [a]	12.8 (2.6)	14.0 (1.9)***
Average length of enrollment (in months)[a]	16.4 (8.6)*	13.7 (7.8)

* $p < .05$; ** $p < .01$; *** $p < .001$;
Note.
a. Mean with standard deviation in the parenthesis.

Table 2.3. Service Utilization by Type of Services.

	Average number of service received (s.d.)	[minimum, maximum]
Placement services	3.15 (3.66)	[0,31]
Psychiatric evaluation services	.60 (.89)	[0,6]
Counseling and therapy services	1.19 (1.16)	[0,5]
In home services	.39 (.69)	[0,3]
Day treatment services	.39 (.75)	[0,4]
Mentoring services	.25 (.52)	[0,3]
Supervision services	.48 (.76)	[0,3]
Transportation services	.74 (.90)	[0,4]
Other services	2.0 (2.07)	[0,19]

Table 2.4. Descriptive Statistics of Children by "Out of Home Placement" services.

	Placement Service received	
	Yes (n=371)	No (n=77)
Gender		
Male	258 (84.0%)	49 (16.0%)
Female	113 (80.1%)	28 (19.9%)
Race/Ethnicity		
White	184 (80.3%)	45 (19.7%)
Black	136 (88.9%)*	17 (11.1%)
Others	51 (77.3%)	15 (22.7%)
Age at the time of enrollment [a]	13.2 (2.4)	12.9 (2.7)
Average length of enrollment (in months)[a]	16.0 (8.6)*	14.3 (6.2)

* $p < .05$;
Note.
a. Mean with standard deviation in the parenthesis.

Table 3.1. Intake and the last CAFAS Scores by the Level of Severity.

Intake CAFAS	Last CAFAS				Total
	Mild (< 40)	Moderate (40 to 69)	Marked (70 to 89)	Severe (> 90)	
Mild (< 40)	7	6	3	0	16 (3.8%)
Moderate (40 to 69)	45	34	19	6	104 (24.9%)
Marked (70 to 89)	48	50	27	12	137 (32.8%)
Severe (> 90)	37	58	31	35	161 (38.5%)
Total	137 (32.8%)	148 (35.4%)	80 (19.1%)	53 (12.7%)	418 (100.0%)

Table 3.2. Regression Analysis Predicting Final CAFAS scores.

Predictors	b	(s.e.)
Intake CAFAS	.257***	(0.06)
Gender: Female (vs. male)	-1.030	(3.60)
Race: Other race (vs. Whites)	-.584	(5.29)
Black (vs. Whites)	-3.335	(3.85)
Age at enrollment	.545	(0.62)
Length of enrollment (months)	-.032	(0.22)
Number of Placement Services	2.874*	(1.27)
ODD/CD	-9.614*	(4.07)
Program: ARTT (vs. Comm. Parts.)	-9.72**	(4.56)
Program ARTT x Other race	19.993**	(9.18)
Program ARTT x Black	16.916**	(7.02)
ODCD x Female	14.838**	(7.28)
R square	0.118	

* p < .05; ** p < .01; *** p < .001;

Table 3.3. Initial and final CAFAS Scores Across Different Race/Ethnicity Groups by Service Providers.

		Initial CAFAS	Final CAFAS	Differences (Final – Initial)
ARTT	Whites (n = 58)	76.90	42.59	-34.31
	Blacks (n = 48)	73.54	55.10	-18.44
	Others (n = 18)	81.67	68.33	-13.34
Comm. Partnerships	Whites (n = 170)	81.26	53.73	-27.53
	Blacks (n = 85)	75.42	49.76	-25.66
	Others (n = 39)	78.46	53.20	-25.26

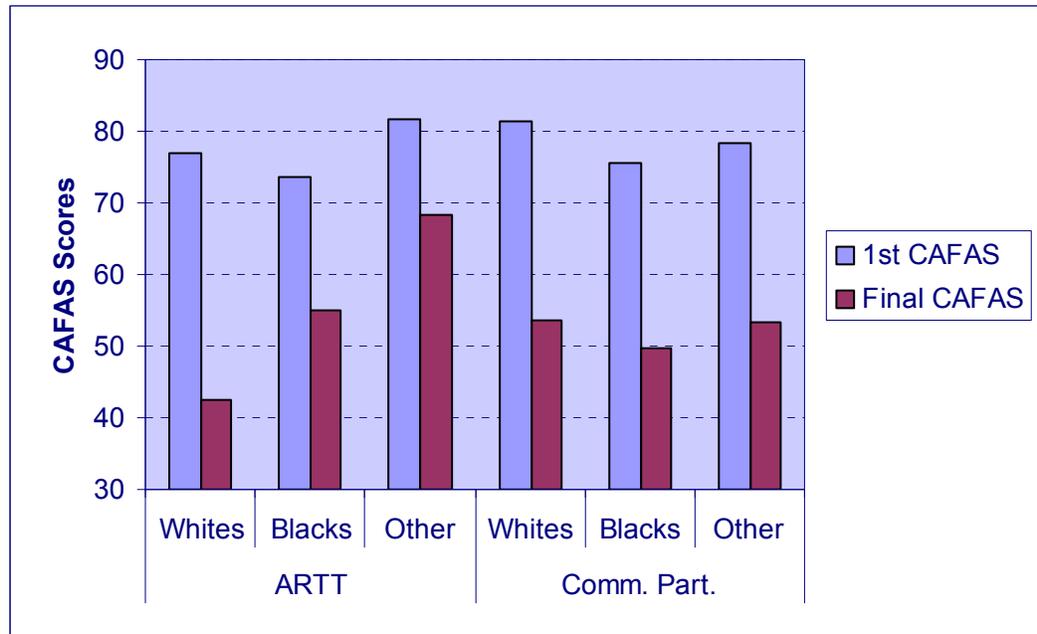Figure 3.1. Program Types by Race/Ethnicity on CAFAS Scores.

Table 3.4. Initial and final CAFAS Scores by Gender and Oppositional Defiant/Conduct Disorders.

		Initial CAFAS	Final CAFAS	Differences (Final – Initial)
Male	ODD/CD (n = 68)	76.17	44.19	-31.98
	No ODD/CD (n = 226)	77.97	52.42	-25.55
Female	ODD/CD (n = 37)	84.67	59.67	-25.00
	No ODD/CD (n = 94)	79.04	54.68	-24.36

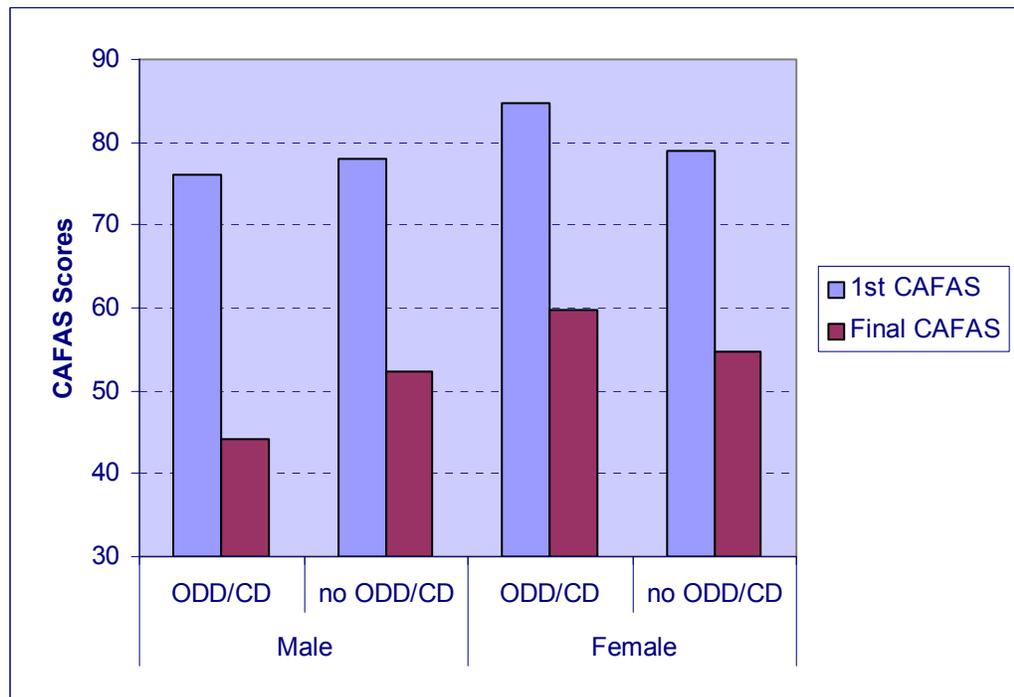Figure 3.2. Gender of Children by ODD/CD on CAFAS Scores.

Table 3.5. Initial and Final Scores of CAFAS by Service Type.

Service Type		Received	Initial CAFAS	Final CAFAS	Differences (Final – Initial)
Psychiatric Evaluation Service		No (n = 192)	77.2	52.8	-24.4
		Yes (n = 161)	79.6	49.7	-29.9
In-Home Service		No (n = 242)	77.9	52.7	-25.2
		Yes (n = 111)	79.0	48.6	-30.4
Day Treatment Service					
	Whites	No (n = 136)	77.7	50.2	-27.5
		Yes (n = 55)	84.5	51.1	-33.4
	Blacks	No (n = 81)	77.4	49.7	-27.7
		Yes (n = 33)	69.7	54.1	-15.6
	Others	No (n = 37)	82.2	55.3	-26.9
		Yes (n = 11)	73.6	58.2	-15.4

Table 4.1. Regression Analysis Predicting Final ROLS scores.

Predictors	b	(s.e.)
ROLS in 6 months	.439***	(0.04)
Gender: Female (vs. male)	.047	(0.11)
Race: Other race (vs. Whites)	.170	(0.19)
Race: Black (vs. Whites)	.385**	(0.14)
Age at enrollment	.045*	(0.02)
Length of enrollment (months)	.013	(0.01)
Oppositional defiant disorder	-.204	(0.12)
Program: ARTT (vs. Comm. Parts.)	.554**	(0.17)
Length of Enrollment x Female	.024+	(0.01)
Program ARTT x Other race	-.087	(0.34)
Program ARTT x Black	-.557*	(0.25)
R square	.327	

+ p < .10; *p < .05; ** p < .01; *** p < .001;

Table 4.2. Initial and Final Scores of ROLS Across Different Race/Ethnicity groups by two programs.

		ROLS in 6 month	Final ROLS	Differences (Final – Initial)
ARRT	Whites (n = 88)	5.38	4.61	-.77
	Blacks (n = 63)	5.53	4.48	-1.05
	Others (n = 26)	5.63	4.79	-.84
Comm. Partnerships	Whites (n = 233)	3.72	3.45	-.27
	Blacks (n = 135)	3.92	3.81	-.11
	Others (n = 56)	3.60	3.41	-.19

Figure 4.1. Program Types by Race/Ethnicity on ROLS Scores.

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