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Life Domain Research Report Series: Youth and Parent Health and Well Being

Michele Preyde
Wilfrid Laurier University

Karen Fensch
Wilfrid Laurier University, kfensch@wlu.ca

Gary Cameron
Wilfrid Laurier University, camerongary@wlu.ca

Lirondel Hazineh
Wilfrid Laurier University

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**Long Term Community Adaptation of Children/Youth and
Families Participating in Residential and Intensive Family
Service Children's Mental Health Programs**

**Life Domain Research Report Series:
Youth and Parent Health and Well Being**

Authors:

Michele Preyde

Karen Frensch

Gary Cameron

Lirondel Hazineh

Partnerships for Children & Families Project

Faculty of Social Work

Wilfrid Laurier University

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Introduction

Children and youth who have participated in children's mental health services often continue to live with a variety of emotional and behavioural challenges after service involvement has ended (Cameron, de Boer, Frensch, & Adams, 2003). A key consideration in understanding the long term community adaptation of these children and youth is the ongoing management of emotional and behavioural challenges and the impact these challenges have in the daily lives of youth and their families. Several standardized measures of mental health, physical health, stress, and quality of life were used to assess parental and youth functioning in the life domain of health and well being both prior to service involvement and at follow up.

Data was collected about youth who had been involved with children's mental health residential treatment (RT) or intensive family service programs (IFS), designed as an alternative to residential treatment. Data was gathered about youth functioning at program entry, discharge and 12 to 18 months after leaving the program. Parent-reported measures were used to assess youth functioning prior to service involvement and at follow up. Discharge information was gathered from program records.

Parents and guardians were asked a series of questions assessing youth behaviour and well being. For example, parents/guardians indicated how often youth experienced difficulty regulating behaviours, such as fidgeting, arguing, or following directions. Parents were also asked about how often youth displayed depressive behaviours such as showing little interest in usual activities or appearing unhappy, sad, or depressed. Most of the information about youth mental health was obtained from parents and guardians. Youth were purposefully not asked any direct questions about their mental health or any mental health treatment they received. Instead, youth were asked to indicate how happy or unhappy they felt about their general health and could speak freely about any details they wished to share in this area. Parents were also asked a series of questions about their own well being including physical and emotional health, quality of life, and daily functioning.

Participants

Participants were recruited from five children's mental health agencies in south western Ontario, Canada that offered both residential treatment and intensive family service programs. Three of these agencies served children aged 5 to 12 years at admission and their families. The remaining two agencies served youth aged 12 to 16 years and their families.

To maximize sample size, two panels of youth were recruited. In the first, all youth and their families entering residential treatment or the home-based programs in our five partner agencies within one year were invited to participate. In the second panel, all youth discharged from our partner agencies within the previous 12 to 18 months and their parents were invited to participate.

This strategy generated a sample of 106 parents or guardians and 33 youth from the residential treatment program and 104 parents or guardians and 35 youth from the intensive family service program. Within the RT sample group, only 48 respondents were parents. The remaining respondents were guardians from the Children's Aid Society (CAS). Respondents in the IFS sample consisted of 101 parents and 3 CAS guardians. Only youth 12 years and older were interviewed individually.

Interviews with caregivers and youth were mainly conducted in the families' homes; however, on a few occasions, participants chose to meet at another location such as at the university or local library. Participants received \$25.00 for their participation. All participants provided informed consent. Ethical approval was obtained from Wilfrid Laurier University Research Ethics Board, and the participating mental health agencies.

Description of Services

Residential treatment involved multi-disciplinary teams who created individual treatment plans for each child based on cognitive-behavioural, psycho educational, brief and solution-focussed models. RT environments were intended to be safe and structured. Children received individual counselling and were usually involved in family counselling. Children lived in residence five days a week and attended either their own community school or an on-site school. Children usually returned home on weekends; however, children referred by a child welfare agency may have remained in residential care on weekends. The expected length of stay was three to nine months.

Intensive-family service was the home-based alternative to residential treatment that was developed in response to the long waitlists for residential services. Originally intended for children and youth with difficulties of comparable severity to those accessing RT, in IFS programs children remained at home, and the family received a range of intensive, home-based services similar to those offered in residential care. The expected length of involvement ranged from three to nine months.

Measures

Clinical data were obtained using The Brief Child and Family Phone Interview, 3rd version (BCFPI-3) (Cunningham, Pettingill, & Boyle, 2002) and the Child and Adolescent Functional Assessment Scale (CAFAS) (Hodges, 2000). These standardised measures were already in use by the participating agencies at intake and at discharge, and the BCFPI data was collected again at follow up. Using existing clinical data reduced the burden for clinicians and enhanced the cost efficiency of the research. Additional quality of life, social relations and community conduct data was collected from parents and guardians.

Child and Adolescent Functional Assessment Scale

The CAFAS was designed to assess impairments in day-to-day functioning secondary to behavioral, emotional, psychological, psychiatric, or substance use problems. Eight subscales assess functioning in various domains: role performance at school or work, home, community (reflects delinquent acts), behavior toward others, mood/emotions (primarily anxiety and depression), self-harm behavior, substance use and problems in thinking.

The CAFAS subscales assess the severity of impairment in domain related role performance. Subscale scores can range from 0 (*minimal or no impairment*) to 30 (*severe disruption or incapacitation*). CAFAS has shown sensitivity to change, good concurrent-criterion validity and predictive validity, good discriminant validity and reliability, and has been widely used (Hodges, Doucette-Gates, & Kim, 2000; Hodges & Kim, 2000; Hodges & Wong, 1996).

The Brief Child and Family Phone Interview-3

The BCFPI-3 is an interview protocol that measures the severity of three externalizing problems (corresponding to attention deficit hyperactivity disorder, oppositional defiant disorder and conduct disorder), and three internalizing disorders (corresponding to separation anxiety disorder, anxiety and general mood and self-harm). It also provides descriptive measures of child functioning (social participation, quality of relationships, and school participation and achievement), and child functioning impacts on the family (social activities and comfort).

The questions used in this computerized instrument were taken from the Revised Ontario Child Health Study, and generate *t*-scores. A *t*-score greater than 70, a score higher than 98% of the general population, is indicative of a significant problem. Internal consistency scores range from .73 to .85, and content validity “was ensured by selecting items which map onto the descriptions of common clinical problems in the Diagnostic and Statistical Manual of the American Psychiatric Association IV” (Cunningham, et al., 2002, p. 77).

KINDL Quality of Life Questionnaire for Children (Parent’s Version)

The KINDL is a 24 item instrument designed to measure health related quality of life in children and adolescents age 8-16 (Ravens-Sieberer & Bullinger, 2000). A higher score corresponds to a higher health related quality of life. Item responses range from 1 (never) to 5 (all the time). There are five subscales that assess quality of life in various life domains including physical health, emotional health, social contacts, self esteem, family and school.

Qualitative Youth Interviews

A subset of youth in our sample who were age 12 or older participated in a semi-structured qualitative interview in which youth were asked to describe, in their own words, their functioning in several life domains including school and work, family, social connections and health. Information youth shared with us included discussions about their physical health,

lifestyle issues such as smoking, alcohol and drug use, and managing mental health concerns like depression, anxiety, and anger.

Data Analysis

For the CAFAS, frequencies were generated to estimate prevalence of clinical severity, and the Wilcoxon Signed-Ranks test was used to assess change over time. For the BCFPI-3, changes from admission to discharge and follow up were analyzed with Repeated Measures Analysis of Variance. Differences between the RT and IFS groups at specific points in time were analyzed with *t*-tests.

Qualitative data were subjected to a thematic analysis. Transcripts of youth interviews were coded using the qualitative data analysis software package N-Vivo. Interview content was organized into four broad life domains (family, social connections and community conduct, health and well being, and school and employment). Through a process of reading the content of a particular life domain by the research team (3 individuals), descriptive codes emerged that were common among the experiences of youth.

Results from the quantitative and qualitative analyses were shared with service providers and program directors from the partner children's mental health agencies. Their feedback was incorporated into the final analyses and interpretations of study results.

Limitations of the Study

While the study sample likely represents experiences typical of many youth and families using these types of programs, the sample came from five agencies in south west Ontario. In areas with very different socio-economic or ethno cultural characteristics or with other service delivery models, the results might be quite different.

Also, the sample represents all of the youth and families we were able to contact who agreed to participate. Participation levels were very high (> 80%) for the youth and families entering the program during our recruitment year; however, since the mental health agencies had minimal contact with youth after they left their programs, we were only able to establish contact with about half of parents/guardians of children of these youth. Selecting a statistically representative sample was not possible. Sample recruitment strategies were also shaped by the limited number of youth and families participating in these programs at the partner agencies.

The study was not intended to be a formal evaluation of the participating programs. It also does not address the relative effectiveness of the two program approaches. The study's focus was on describing what happens over time to these youth and their families. For this purpose, despite the above limitations, the data was sufficient.

Results

This report is organized into child/youth health and well being followed by parent health and well being. For each area of interest, we begin with a presentation of data from parent-reported standardized measures. This is followed by a summary of youth perspectives. Results are organized by timeframe: admission, discharge, and follow up. There is some variation in the data presented at each timeframe, as not all questions or measures were administered or available at all points in time. The information collected at admission and discharge was collected retrospectively from paper files. As well, parents or guardians were asked to reflect back to the few weeks prior to youth entering services to answer certain questions. Youth spoke mostly about current health and well being.

Within each section, results are further organized by program type. Where available, we present scores for the group of youth who received residential treatment separately from the scores for youth who received intensive family services. While the scores for these two groups of youth are presented side by side and comparisons are often made, this study is not designed to evaluate the effectiveness of residential treatment or intensive family services. Our intention is to provide a portrait of youth health and well being prior to admission, immediately following discharge from treatment, and at follow up.

Youth Health & Well Being

Parents and guardians were asked to assess their child or youth's health in several areas including mental health, emotional health, and physical health, as well as youth overall well being. As there were many measures used to evaluate youth mental health, we organized the mental health measures into measures that assess moods and emotions (internalizing behaviours) and measures that assess activities and acting out behaviours (externalizing behaviours). All other measures, such as those providing information on self esteem and physical health, were categorized as indicators of well being. Where there is data available for both admission and follow up, we comment on any patterns of change in health and well being over time.

Mental Health

The following measures were used to understand youth moods, emotions, and levels of depression and anxiety:

- CAFAS Moods/Emotions Subscale
- CAFAS Thinking Subscale
- BCFPI Separation from Parents Subscale
- BCFPI Managing Anxiety Subscale
- BCFPI Managing Moods Subscale

Moods & Emotions

(a) CAFAS MOODS/EMOTIONS SUBSCALE

The CAFAS Moods/Emotions Subscale assesses youth levels of anxiety, depression, moodiness, fear, worry, irritability, tenseness, panic, and anhedonia. A higher score is indicative of greater impairment in this domain. Scores ranged from 0 (no disruption of functioning) where a youth may feel normal distress, but his or her daily life is not disrupted to 30 (severe disruption of functioning or incapacitation) where depression is accompanied by suicidal ideation or the youth does not want to leave the home.

i. Admission

At admission, RT youth's mean score on the CAFAS Moods/Emotions Subscale was 16.45 and the mean score for IFS youth was 15.44. These scores were slightly higher than the 2006 Ontario mean score of 14.03 which was calculated using scores from approximately 18,520 children at admission to children's mental health services (including both inpatient and outpatient services).¹ Approximately 45% of both RT and IFS youth were reported to have scores of 20 at admission. This suggested that youth in both groups were experiencing "major or persistent disruption" in their lives as a result of their negative emotions (such as depression or anxiety). A Mann-Whitney test, summarized in Table 1, revealed that there was no difference between the scoring distributions for each group ($p=.531$).

Table 1: CAFAS Moods/Emotions Subscale Scores at Admission

Statistics	RT (N=79)	IFS (N=90)	2006 Ontario (N=18,520)
Mean	16.45	15.44	14.03
Std. Dev.	8.62	9.01	
Frequencies			
0.00=	8 (10.1%)	14 (15.6%)	17.9%
10.00=	24 (30.4%)	24 (26.7%)	33.7%
20.00=	35 (44.3%)	41 (45.6%)	38.6%
30.00=	12 (15.2%)	11 (12.2%)	9.8%
Total=	79	90	
Mann-Whitney Test	U=3368.50 Z=-.626 p=.531		

ii. Discharge

Table 2 shows that, at discharge, the mean score for RT youth decreased to 12.71 and to 10.24 for IFS youth from 16.45 and 15.44 respectively. Approximately 35% of IFS youth and 37% of RT youth were reported to have mild impairment (score of 10) on the CAFAS

¹ Ontario's Children with Mental Health Needs 2006 Report. CAFAS in Ontario, SickKids.

Moods/Emotions Subscale. The distribution of scores at discharge was similar for both groups and a Mann-Whitney test revealed no statistically significant difference on the CAFAS Moods/Emotions subscale at discharge ($p=.101$).

Table 2: CAFAS Moods/Emotions Subscale Scores at Discharge

Statistics	RT (N=70)	IFS (N=82)
Mean	12.71	10.24
Std. Dev.	9.31	9.15
Frequencies		
0.00=	16 (22.9%)	28 (34.1%)
10.00=	26 (37.1%)	29 (35.4%)
20.00=	21 (30.0%)	20 (24.4%)
30.00=	7 (10.0%)	5 (6.1%)
Total=	70	82
Mann-Whitney Test	U=2447.50 Z=-1.639 p=.101	

We next looked for any patterns of change in scores on the CAFAS Moods/Emotions Subscale from admission to discharge for both RT and IFS youth. Table 3 summarizes the direction of change for youth with scores at both admission and discharge. There were 32 RT youth and 38 IFS youth who moved to a lower score from admission to discharge on the CAFAS Moods/Emotions Subscale indicative of a reduction in severity of impairment. Eight RT youth and 7 IFS youth had an increase in severity of impairment from admission to discharge. The remaining youth had no change in their scores over time. A Wilcoxon Signed Ranks test revealed a statistically significant difference for both groups on their scores from admission to discharge ($p=.000^*$).

Table 3: Change in CAFAS Moods/Emotions Subscale from Admission to Discharge

	RT	IFS
Reduction in Severity of Impairment	32 (47.1%)	38 (46.3%)
Increase in Severity of Impairment	8 (11.7%)	7 (8.5%)
No Change in Severity of Impairment	28 (41.2%)	37 (45.2%)
Total	68	82
Wilcoxon Signed Ranks Test	Z= -3.879 p=.000*	Z= -4.203 p=.000*

Figure 1 shows the distribution of CAFAS Moods/Emotions Subscale scores at admission and discharge for RT youth. The greatest proportion of youth had a score of 20 at admission. At discharge, a score of 10 was the most frequently reported.

Figure 1: CAFAS Moods/Emotions Subscale Scores for RT Youth Only

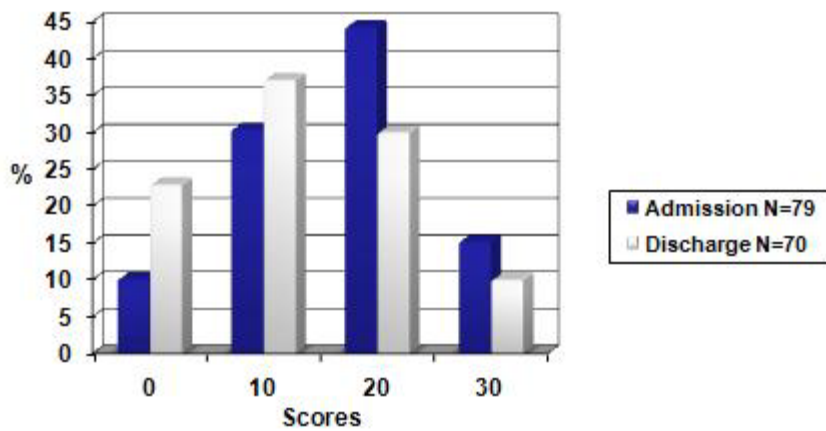
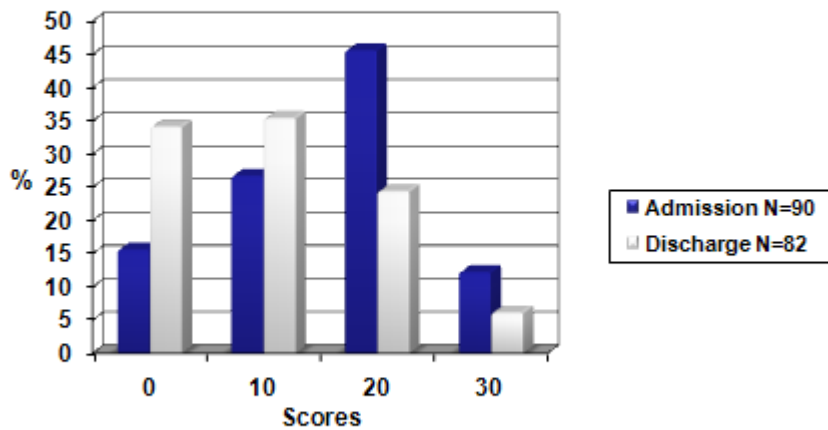


Figure 2 shows the distribution of IFS youth scores on the CAFAS Moods/Emotions Subscale at admission and discharge. Similar to RT youth at admission, a score of 20 was the most frequently reported score. At discharge, the greatest proportion of youth had a score of 0.

Figure 2: CAFAS Moods/Emotions Subscale Scores for IFS Youth Only



(b) CAFAS THINKING SUBSCALE

The CAFAS Thinking Subscale measures impairment in thinking as evidenced by normal communication and behaviour. The lowest score, a score of 0 (no disruption of functioning), indicates “thought, as reflected by communication, is not disordered or eccentric.” The highest score, a score of 30 (severe disruption or incapacitation), is indicated when a youth cannot attend school, does not have normal friendships, and cannot interact adequately in the community due to impairment in thinking.

i. Admission

The majority of both RT (65.8%) and IFS (73.3%) youth were reported to have no impairment in thinking as measured by the CAFAS Thinking Subscale. Table 4 shows that the mean score for RT youth was 5.94 and 4.00 for IFS youth, both of which are only slightly higher than the 2006 Ontario mean score. There was no difference between RT youth and IFS youth in our sample on this measure (p=.203).

Table 4: CAFAS Thinking Subscale Scores at Admission

Statistics	RT (N=79)	IFS (N=90)	2006 Ontario (N=18,520) ²
Mean	5.94	4.00	2.34
Std. Dev.	9.13	7.15	
Frequencies			
0.00=	52 (65.8%)	66 (73.3%)	84.7%
10.00=	10 (12.7%)	12 (13.3%)	8.2%
20.00=	14 (17.7%)	12 (13.3%)	6.1%
30.00=	3 (3.8%)	0	0.9%
Total=	79	90	
Mann-Whitney Test	U=3228.00 Z=-1.274 p=.203		

ii. Discharge

At discharge, the mean score on the CAFAS Thinking Subscale for RT youth was 3.71 and 2.68 for IFS youth. A Mann-Whitney test, summarized in Table 5, revealed no statistically significant difference between the two groups on this measure at discharge despite the slightly greater proportion of IFS youth showing no impairment (score of 0) than RT youth (p=.360).

² SickKids (2006)

Table 5: CAFAS Thinking Subscale Scores at Discharge

Statistics	RT (N=70)	IFS (N=82)
Mean	3.71	2.68
Std. Dev.	7.25	6.09
Frequencies		
0.00=	53 (75.7%)	67 (81.7%)
10.00=	9 (12.9%)	8 (9.8%)
20.00=	7 (10.0%)	7 (8.5%)
30.00=	1 (1.4%)	0
Total=	70	82
Mann-Whitney Test	U=2694.00 Z=-.915 p=.360	

Looking for any change in scores over time, a Wilcoxon Signed Ranks test (summarized in Table 6) revealed a statistically significant difference between IFS youth CAFAS Thinking Subscale scores from admission to discharge ($p=.047^*$). There was no statistically significant change in scores from admission to discharge for RT youth ($p=.883$). There were 7 IFS youth and 6 RT youth who moved to a lower score from admission to discharge indicative of a reduction in severity of impairment over time. Four RT youth and 1 IFS youth had an increase in severity of impairment from admission to discharge. The remaining youth had no change in their scores over time.

Table 6: Change in CAFAS Thinking Subscale Scores from Admission to Discharge

	RT	IFS
Reduction in Severity of Impairment	18 (26.5%)	11 (13.4)
Increase in Severity of Impairment	5 (7.4%)	2 (2.4%)
No Change in Severity of Impairment	45 (66.1%)	69 (84.2%)
Total	68	82
Wilcoxon Signed Ranks Test	Z= -1.943 p=.052*	Z= -2.166 p=.030*

Figure 3 and Figure 4 show the distribution of scores on the CAFAS Thinking Subscale at admission and discharge for RT and IFS youth. The majority of youth at both admission and discharge were reported to have no impairment in thinking.

Figure 3: CAFAS Thinking Subscale Scores for RT Youth Only

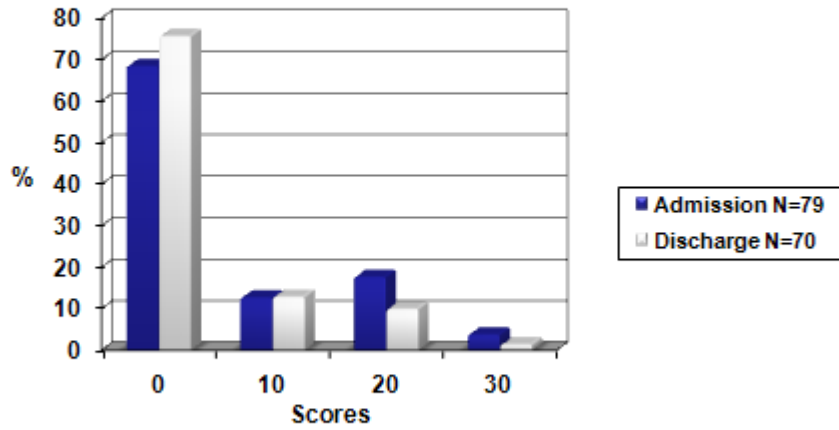
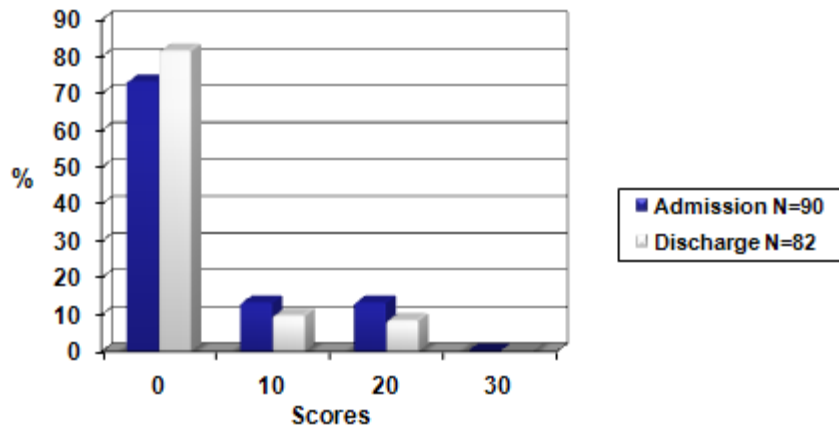


Figure 4: CAFAS Thinking Subscale Scores for IFS Youth Only



(c) BCFPI: SEPARATION FROM PARENTS

The BCFPI: Separation from Parents Subscale is a measure of how well youth are able to comfortably separate from their parent(s). Parents were asked, for example, to indicate how often youth were afraid to sleep without parents nearby, complained of feeling sick before separating from parents, or worried that bad things would happen to loved ones. A higher score indicated greater difficulty in separating from loved ones such as a parent.

i. Admission

At admission, both RT and IFS youth had mean scores lower than the clinical cut off score of 70. Table 7 shows RT youth had a mean score of 61.49 and IFS youth had a similar mean score of 61.68. Both of these scores were slightly higher than the 2006 Ontario average score for 4,918 children administered the BCFPI at entry to children’s mental health services (includes inpatient and outpatient programs).³ There was no statistically significant difference between the mean scores for RT youth and IFS youth in our sample ($p=.947$).

Table 7: BCFPI Separation for Parents Subscale Score at Admission

Statistics	RT (N=74)	IFS (N=83)	2006 Ontario (N=4918)
Mean	61.49	61.68	59.39
Std. Dev.	16.56	18.40	
T-test	t= -.067 df=155 p=.947 (equal variances assumed)		

ii. Follow Up

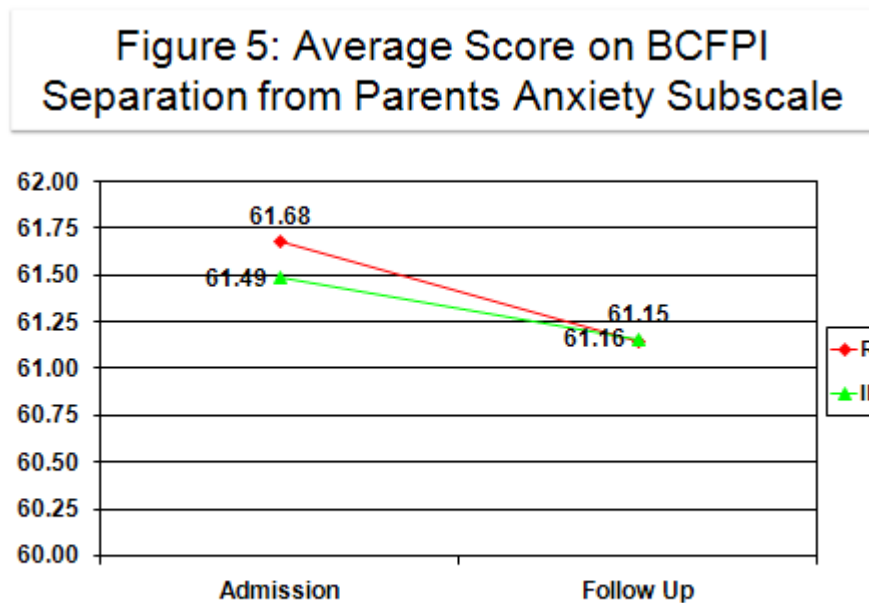
Table 8 shows the mean scores for RT youth and IFS youth on the BCFPI Separation from Parents Subscale at follow up. Both groups showed little change in their mean scores from admission to follow up. RT youth had a mean score of 61.49 at admission and 61.16 at follow up. Similarly, IFS youth had a mean score of 61.68 at admission and 61.15 at follow up. There was no statistically significant difference between the two groups at follow up on this measure ($p=.999$).

³ St. Pierre, J. (Feb, 2007). BCFPI/CAFAS outcomes at CPRI/MCYS. Ontario Psychological Association Annual Conference, Toronto.

Table 8: BCFPI Separation for Parents Subscale Score at Follow Up

Statistics	RT (N=103)	IFS (N=104)
Mean	61.16	61.15
Std. Dev.	16.69	16.14
T-test	t= .001 df=205 p=.999 (equal variances assumed)	

Figure 5 shows little change in scores over time for both RT and IFS youth.



Using a repeated measures analysis, we looked for any significant patterns of change in scores on the BCFPI Separation from Parents Subscale over time for RT youth and IFS youth. Table 9 contains the results of this analysis which shows that there was no statistically significant change in scores over time for either group ($p=.302$). This pattern did not differ by program either ($p=.922$).

**Table 9: BCFPI Separation from Parents Subscale Over Time
(from Admission to Follow Up)**

	Type III Sum of Squares	df	Mean Square	F	Sig.
Change over Time	162.731	1	162.731	1.072	.302
Change by Program	1.474	1	1.474	.010	.922
Error(time)	23231.993	153	151.843		

(d) BCFPI: MANAGING ANXIETY

The BCFPI: Managing Anxiety Subscale provides information on how much youth worry about past, present, or future events. For example, parents were asked to reflect on how often their child/youth worried about past behaviour or was afraid of making mistakes. A higher score was indicative of increased anxiety.

i. Admission

Table 10 shows that RT youth had a mean score of 59.53 and IFS youth had a mean score of 59.93 on this subscale at admission. Both groups had a mean score less than the clinical cut off score of 70 which suggested that these youth were not experiencing clinical levels of anxiety as measured by the BCFPI: Managing Anxiety Subscale at admission. Average scores for both groups however were slightly higher than the 2006 Ontario average admission score. There was no statistically significant difference between mean scores for RT youth and IFS youth in our sample ($p=.877$).

Table 10: BCFPI Managing Anxiety Subscale Scores at Admission

Statistics	RT (N=74)	IFS (N=83)	2006 Ontario (N=4918)
Mean	59.53	59.93	58.63
Std. Dev.	15.51	16.54	
T-test	t= -.155 df=155 p=.877 (equal variances assumed)		

ii. Follow Up

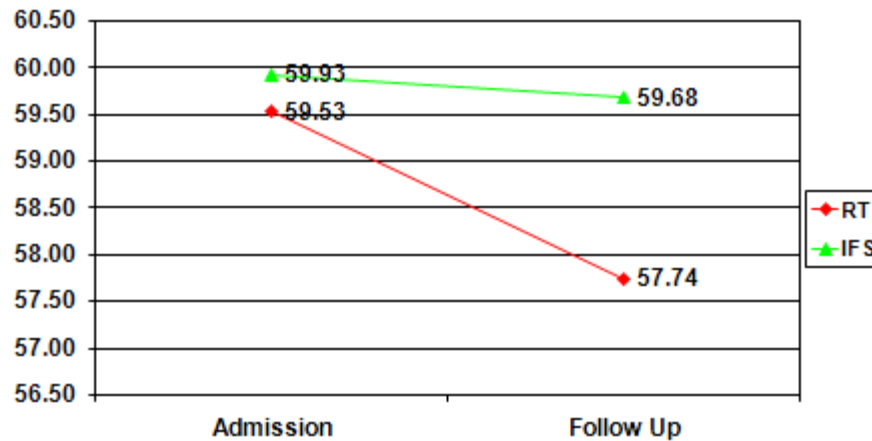
Table 11 shows little change in mean scores for IFS youth on this subscale from admission to follow up. IFS youth had a mean score of 59.93 at admission and 59.63 at follow up. RT youth had a slightly lower average score of 57.74 at follow up in comparison to 59.53 at admission. Despite the difference in mean scores at follow up between RT youth and IFS youth, a t-test revealed no statistically significant difference between groups ($p=.316$).

Table 11: BCFPI Managing Anxiety Subscale Scores at Follow Up

Statistics	RT (N=103)	IFS (N=104)	2006 Ontario
Mean	57.74	59.63	
Std. Dev.	13.90	13.88	
T-test	t= -1.005 df=205 p=.316 (equal variances assumed)		

Figure 6 shows that IFS youth had slightly higher mean scores than RT youth on the BCFPI: Managing Anxiety Subscale at both admission and follow up. RT youth appeared to experience a reduction in anxiety at follow up; however, a repeated measures analysis, summarized in Table 12, revealed that this pattern of change was not statistically significant (p=.698). Furthermore, there was no statistically significant difference in the patterns of change over time between the two groups of youth (p=.685).

Figure 6: Average Score on BCFPI Managing Anxiety Subscale



**Table 12: BCFPI Managing Anxiety Subscale Over Time
(from Admission to Follow Up)**

	Type III Sum of Squares	df	Mean Square	F	Sig.
Change over Time	18.037	1	18.037	.152	.698
Change by Program	19.597	1	19.597	.165	.685
Error(time)	18204.657	153	118.985		

(e) BCFPI: MANAGING MOOD

The BCFPI: Managing Mood Subscale measures the extent to which youth have lost interest in their usual activities and relationships which once brought them enjoyment. Parents were asked questions about how often their child/youth seemed unhappy, sad, or depressed or was unable to enjoy him/herself. A higher score indicated greater difficulty managing their mood.

i. Admission

At admission, RT youth had a mean score of 74.12 and IFS youth had a mean score of 73.44 on the BCFPI Managing Mood Subscale. While RT youth appeared to have a slightly higher mean score than IFS youth on this measure, a t-test summarized in Table 13 showed no statistically significant difference between the two groups at admission ($p=.832$). Both groups in our study had higher average scores on the BCFPI Managing Mood Subscale than the 2006 Ontario comparison sample average score of 65.19.

Table 13: BCFPI Managing Mood Subscale Scores at Admission

Statistics	RT (N=74)	IFS (N=84)	2006 Ontario (N=4918)
Mean	74.12	73.44	65.19
Std. Dev.	19.71	20.15	
T-test	t= .213 df=156 p=.832 (equal variances assumed)		

ii. Follow Up

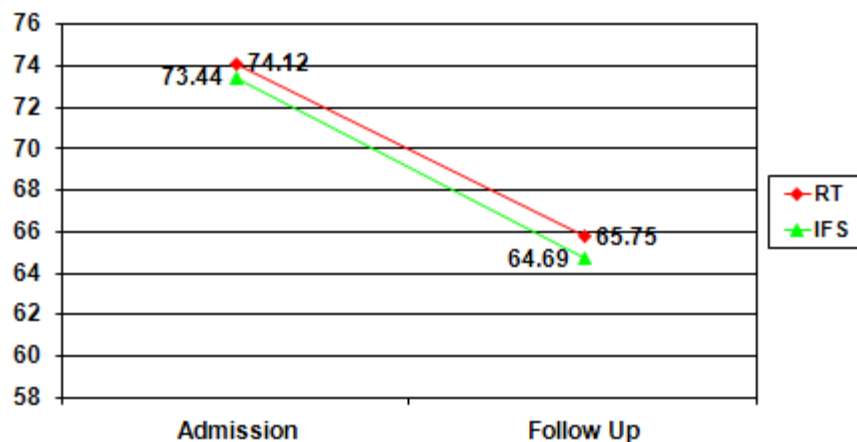
Table 14 shows that, at follow up, RT youth appeared to have a slightly higher average score (65.75) on the BCFPI Managing Mood Subscale than IFS youth (64.69). This difference, however, was not statistically significant ($p=.670$). Both groups had mean scores that were below the clinical cut off score of 70.

Table 14: BCFPI Managing Mood Subscale Scores at Follow Up

Statistics	RT (N=102)	IFS (N=103)
Mean	65.75	64.69
Std. Dev.	18.13	17.33
T-test	t= .427 df=203 p=.670 (equal variances assumed)	

Figure 7 shows that both RT youth and IFS youth saw a reduction in their average scores on the BCFPI Managing Mood Subscale suggesting that both groups were experiencing less depressive symptoms at follow up than admission.

Figure 7: Average Score on BCFPI Managing Mood Subscale



Given that both groups saw a reduction in average scores on this measure from admission to follow up, we looked for any statistically significant changes in scores over time for both RT and IFS youth. A repeated measures analysis, summarized in Table 15, shows that there was a significant difference between the scores at admission and those at follow up ($p=.000^*$). There was no difference, however, between the patterns of change over time for each group of youth ($p=.961$). Both RT and IFS youth had significantly lower scores at follow up than admission suggesting that they were experiencing greater interest and enjoyment of life than at admission.

Table 15: Change in BCFPI Managing Mood Subscale Scores over Time (from Admission to Follow Up)

	Type III Sum of Squares	df	Mean Square	F	Sig.
Change over Time	4817.838	1	4817.838	21.438	.000*
Change by Program	.551	1	.551	.002	.961
Error(time)	33934.440	151	224.731		

(e) BCFPI: INTERNALIZING BEHAVIOUR COMPOSITE SCALE

The BCFPI: Internalizing Behaviour Composite Scale is made up of three mental health subscales: Separation from Parents, Managing Anxiety, and Managing Mood subscales. This composite scale provides an overall indication of youth internalizing behaviour. A higher score is indicative of increased internalizing behaviour.

i. Admission

From Table 16, we see that RT youth had a mean score of 67.90 and IFS youth had a mean score of 67.73 on the BCFPI: Internalizing Behaviour Composite Scale. Both groups had a mean score that was lower than a score of 70 which acts at a threshold for determining clinical levels of internalizing behaviours (score of 70 or greater). Both groups however had average scores that were higher than the 2006 Ontario average score of 63.72 on this subscale. A t-test revealed no statistically significant difference between mean scores for RT and IFS youth in our study at admission (p=.952).

Table 16: BCFPI Internalizing Behaviour Scores at Admission

Statistics	RT (N=72)	IFS (N=82)	2006 Ontario (N=4918)
Mean	67.90	67.73	63.72
Std. Dev.	16.05	19.03	
T-test	t= .060 df=152 p=.952 (equal variances assumed)		

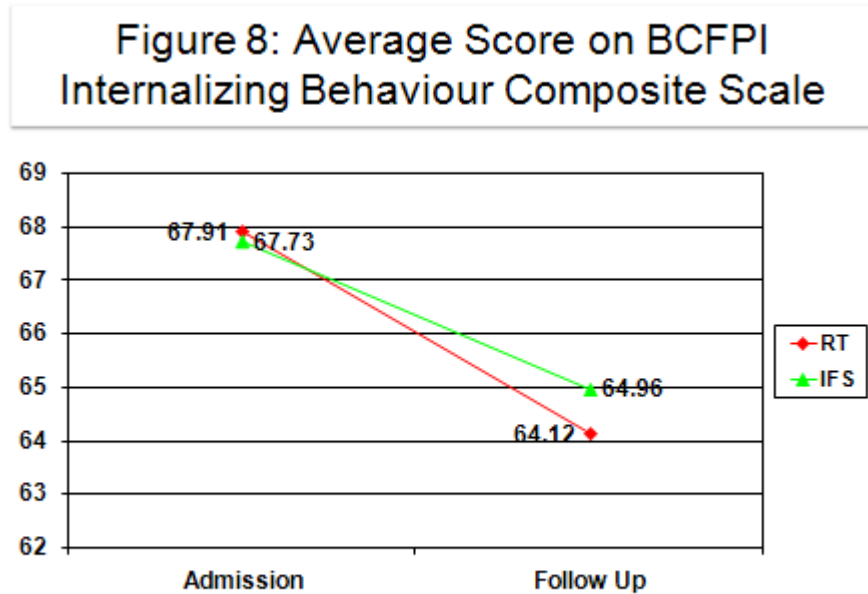
ii. Follow Up

At follow up, RT youth had a mean score of 64.12 and IFS youth had a mean score of 64.96 on the BCFPI Internalizing Behaviour Composite Scale. A t-test, summarized in Table 17, revealed no significant difference between the mean scores for the two groups (p=.694).

Table 17: BCFPI Internalizing Behaviour Scores at Follow Up

Statistics	RT (N=102)	IFS (N=104)
Mean	64.12	64.96
Std. Dev.	15.35	15.44
T-test	t= -.394 df=204 p=.694 (equal variances assumed)	

Figure 8 shows the change in mean scores for each group from admission to follow up on the BCFPI Internalizing Behaviour Composite Scale. RT youth and IFS youth showed a similar reduction in mean scores from admission to follow up.



To test for any statistically significant change in mean scores over time for either group, we conducted a repeated measures analysis which is summarized in Table 18. Results revealed a statistically significant change over time in scores on this scale for both RT youth and IFS youth ($p=.012^*$). There was no statistically significant difference between the patterns of change over time for each group ($p=.446$) which indicated both groups saw a similar reduction in mean scores on the BCFPI Internalizing Behaviour Composite Scale from admission to follow up.

Table 18: Change in BCFPI Internalizing Behaviour Composite Scale Scores over Time (from Admission to Follow Up)

	Type III Sum of Squares	df	Mean Square	F	Sig.
Change over Time	995.376	1	995.376	6.512	.012*
Change by Program	89.370	1	89.370	.585	.446
Error(time)	22775.279	149	152.854		

(f) KINDL: QUALITY OF LIFE—EMOTIONAL WELL BEING SUBSCALE

Parents and guardians were asked to assess youth emotional well being by indicating how frequently youth felt alone, were scared or unsure of him/herself, or did not feel “much like doing anything.” Parents and guardians responded to these questions both for how youth were feeling presently (follow up) and how youth were feeling just prior to admission (admission). Mean scores on the KINDL: Quality of Life—Emotional Well Being Subscale could range from 1 to 5.

i. Admission

At admission, RT youth had a mean score of 2.77 and IFS youth had a mean score of 2.90 on the KINDL: Quality of Life—Emotional Well Being Subscale. There was no statistically significant difference between these two mean scores at admission ($p=.341$). T-test results are summarized in Table 19.

Table 19: KINDL Quality of Life—Emotional Well Being Subscale Scores at Admission

Statistics	RT (N=87)	IFS (N=103)
Mean	2.77	2.90
Std. Dev.	.921	.848
T-test	t= -.955 df=188 p=.341 (equal variances assumed)	

ii. Follow Up

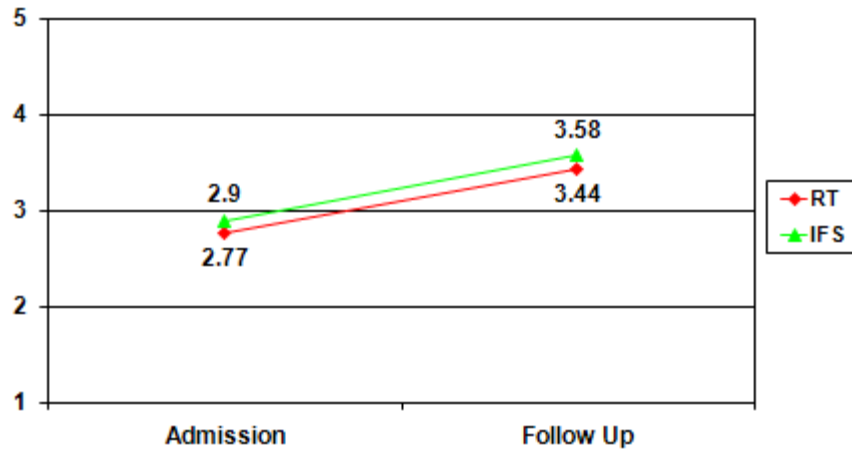
Table 20 shows that at follow up, both RT and IFS youth were reported to have greater quality of emotional life than admission. RT youth had a mean score of 3.44 and IFS youth had a mean score of 3.58. Results of a t-test revealed no significant difference between mean scores for each group ($p=.195$).

Table 20: KINDL Quality of Life—Emotional Well Being Subscale Scores at Follow Up

Statistics	RT (N=99)	IFS (N=99)
Mean	3.44	3.58
Std. Dev.	.807	.786
T-test	t= -1.300 df=196 p=.195 (equal variances assumed)	

Figure 9 shows that the mean score for IFS youth increased from 2.9 at admission to 3.58 at follow up. The mean score for RT youth increased from 2.77 at admission to 3.44 at follow up. IFS youth were reported to have slightly higher quality of life in this area than RT youth at both admission and follow up.

Figure 9: Average Score on KINDL Quality of Life-Emotional Subscale



Results of a repeated measures analysis revealed that there was a statistically significant difference in mean scores from admission to follow up for both RT and IFS youth on the KINDL: Quality of Life—Emotional Well Being Subscale ($p=.000^*$). Table 21 shows that this pattern of change was similar for both groups as any change over time by program type was not statistically significant ($p=.942$). Both RT and IFS youth were reported to have greater quality of emotional life at follow up than admission.

Table 21: Change in KINDL: Quality of Life—Emotional Well Being Scores over Time (from Admission to Follow Up)

	Type III Sum of Squares	df	Mean Square	F	Sig.
Change over Time	39.494	1	39.494	89.532	.000*
Change by Program	.002	1	.002	.005	.942
Error(time)	78.078	177	.441		

Behaviours & Activities

The following standardized measures were used to understand aspects of youth mental health considered to be “externalizing” behaviours such as using alcohol or drugs, engaging in self harming behaviours, or problems with attention and hyperactivity. They were:

- CAFAS Substance Use Subscale
- CAFAS Self Harmful Behaviour Subscale
- BCFPI: Self Harm Subscale
- BCFPI: Regulating Attention Subscale
- BCFPI: Regulating Impulsivity and Activity Level Subscale
- BCFPI: Regulating Attention, Impulsivity, and Activity Level Subscale
- BCFPI: Externalizing Behaviour Composite Scale
- BCFPI: Total Problems Composite Scale

(a) CAFAS SUBSTANCE USE SUBSCALE

The CAFAS Substance Use Subscale assess the extent to which youth use substances such as alcohol and other drugs and the impact of substance use on daily functioning. A higher score is indicative of greater impairment in this domain. Scores ranged from 0 (no disruption of functioning) where a youth may have “tried” a particular substance but there were no negative consequences to 30 (severe disruption of functioning or incapacitation) where a youth’s lifestyle revolved around the acquisition and use of substances or a youth was pregnant or was a parent and routinely used drugs or alcohol.

i. Admission

Table 22 shows that at admission both RT and IFS youth in our sample had lower mean scores on the CAFAS Substance Use Subscale than the 2006 Ontario average of 3.01. RT youth had a mean score of 2.91 and IFS youth had a mean score of 3.44. The distribution of scores, however, was similar to the Ontario distribution with over 80% of all youth showing minimal or no impairment (score of 0) on this subscale. A Mann-Whitney test, which compared the distribution of RT scores to IFS scores, showed no statistically significant difference between the two groups on this subscale ($p=.550$).

Table 22: CAFAS Substance Use Subscale Scores at Admission

Statistics	RT (N=79)	IFS (N=90)	2006 Ontario (N=18,520)
Mean	2.91	3.44	3.01
Std. Dev.	7.53	7.95	
Frequencies			
0.00=	67 (84.8%)	73 (81.1%)	84.5%
10.00=	4 (5.1%)	7 (7.8%)	5.3%
20.00=	5 (6.3%)	6 (6.7%)	5.6%
30.00=	3 (3.8%)	4 (4.4%)	4.6%
Total=	79	90	
Mann-Whitney Test	U=3430.50 Z=-.598 p=.550		

ii. Discharge

At discharge, both groups of youth saw a slight decrease in mean score on the CAFAS Substance Use Subscale. Table 23 shows that RT youth had a mean score of 2.00 at discharge which was lower than the mean score at admission of 2.91. IFS youth had a mean score of 2.19 at discharge in comparison to their mean score of 3.44 at admission. The distribution of scores at discharge was relatively unchanged from admission. Again, the majority of youth in both groups showed minimal or no impairment (score of 0) on the CAFAS Substance Use Subscale. Also similar to admission, there was no difference between the distributions of scores for RT and IFS youth ($p=.880$).

Table 23: CAFAS Substance Use Subscale Scores at Discharge

Statistics	RT (N=70)	IFS (N=82)
Mean	2.00	2.19
Std. Dev.	6.27	6.67
Frequencies		
0.00=	62 (88.6%)	72 (87.8%)
10.00=	4 (5.7%)	5 (6.1%)
20.00=	2 (2.9%)	2 (2.3%)
30.00=	2 (2.9%)	3 (3.7%)
Total=	70	82
Mann-Whitney Test	U=2847.0 Z=-.152 p=.880	

We next looked for any patterns of change in scores on the CAFAS Substance Use Subscale from admission to discharge for both RT and IFS youth. Table 24 summarizes the direction of change for youth with scores at both admission and discharge. There were 8 RT youth and 9 IFS youth who moved to a lower score from admission to discharge on the CAFAS Substance Use Subscale indicative of a reduction in severity of impairment. There were 2 RT youth and 3 IFS youth with an increase in severity of impairment from admission to discharge. The majority of youth had no change in their scores over time. A Wilcoxon Signed Ranks test revealed no statistically significant change in scores for either RT youth or IFS youth from admission to discharge ($p=.298$ for RT youth and $p=.138$ for IFS youth).

Table 24: Change in CAFAS Substance Use Subscale Scores from Admission to Discharge

	RT	IFS
Reduction in Severity of Impairment	8 (11.8%)	9 (11%)
Increase in Severity of Impairment	2 (2.9%)	3 (3.7%)
No Change in Severity of Impairment	58 (85.3%)	70 (85.3%)
Total	68	82
Wilcoxon Signed Ranks Test	Z= -1.040 p=.298	Z= -1.485 p=.138

Figure 10 shows the distribution of scores for RT youth at admission and discharge on the CAFAS Substance Use Subscale. The distribution of scores remained relatively unchanged from admission to discharge. At both times, there were no RT youth who scored at the most severe level of impairment (score of 30).

Figure 10: CAFAS Substance Use Subscale Scores for RT Youth Only

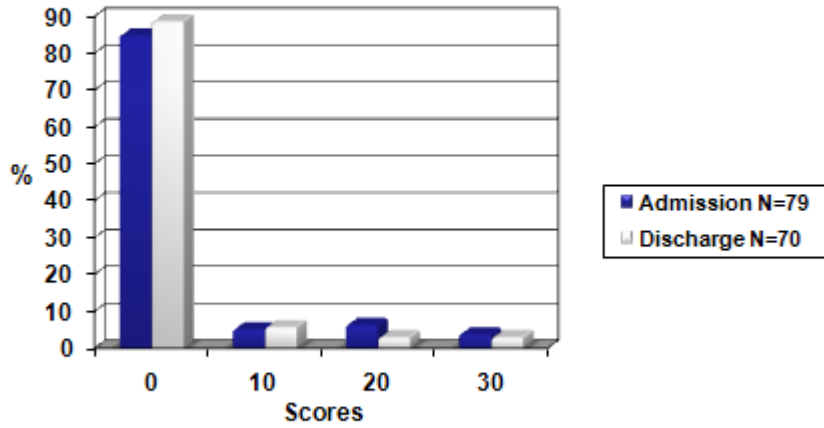
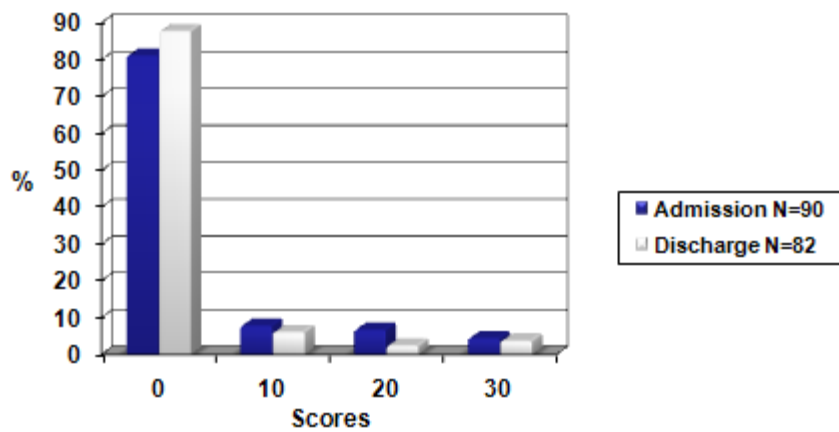


Figure 11 shows the distribution of scores for IFS youth at admission and discharge on the CAFAS Substance Use Subscale. There was no significant difference in the distribution of scores over time.

Figure 11: CAFAS Substance Use Subscale Scores for IFS Youth Only



(b) CAFAS SELF HARMFUL BEHAVIOUR SUBSCALE

The CAFAS Self Harmful Behaviour Subscale is a measure of youth behaviour intended to harm one’s self through non-accidental injury or mutilation. Scores could range from 0 (minimal or no impairment), where “behaviour is not indicative of tendencies toward self harm”, to 30 (severe disruption or incapacitation), where a youth has engaged in self destructive behaviour resulting in serious injury or has a “clear plan to hurt self, or genuine desire to die”.

i. Admission

At admission, RT youth had a mean score of 7.34 and IFS youth had a mean score of 4.00 on the CAFAS Self Harmful Behaviour Subscale. While IFS youth in our sample had a mean score that was below the 2006 Ontario average of 4.31, RT youth had a higher mean score. Table 25 shows that approximately 43% of RT youth were reported to engage in some form of self harming behaviour at admission (score of 10 or higher). In contrast, just over 25% of IFS youth had scores of 10 or greater indicating the presence of self harming behaviour. A Mann-Whitney test revealed a significant difference between the distribution of scores for RT youth and IFS youth on this measure at admission (p=.012*).

Table 25: CAFAS Self Harmful Behaviour Subscale Scores at Admission

Statistics	RT (N=79)	IFS (N=90)	2006 Ontario (N=18,520)
Mean	7.34	4.00	4.31
Std. Dev.	9.56	7.76	
Frequencies			
0.00=	45 (57%)	67 (74.4%)	77.5%
10.00=	14 (17.7%)	13 (14.4%)	5.6%
20.00=	16 (20.3%)	7 (7.8%)	13.2%
30.00=	4 (5.1%)	3 (3.3%)	3.7%
Total=	79	90	
Mann-Whitney Test	U=2883.50 Z=-2.525 p=.012*		

ii. Discharge

Table 26 shows that RT youth had a mean score of 4.37 and IFS youth had a mean score of .975 at discharge on the CAFAS Self Harmful Behaviour Subscale. Approximately 78% of RT youth and 90% of IFS youth were reported to have minimal or no presence of self harmful behaviour at discharge. Similar to admission, a Mann-Whitney test revealed no significant difference between the distribution of scores for RT and IFS youth at discharge (p=.103).

Table 26: CAFAS Self Harmful Behaviour Subscale Scores at Discharge

Statistics	RT (N=70)	IFS (N=82)
Mean	3.28	1.21
Std. Dev.	7.93	4.27
Frequencies		
0.00=	58 (82.9%)	74 (90.2%)
10.00=	4 (5.7%)	7 (8.5%)
20.00=	5 (7.1%)	0
30.00=	3 (4.3%)	1 (1.2%)
Total=	70	82
Mann-Whitney Test	U=2634.50 Z=-1.483 p=.138	

We next looked for any change in scores on the CAFAS Self Harmful Behaviour Subscale from admission to discharge for both RT and IFS youth. Table 27 summarizes the direction of change over time for each youth with scores at both admission and discharge. There were 22 RT youth and 18 IFS youth who moved to a lower score from admission to discharge indicative of a reduction in self harming behaviours. Six RT youth and 3 IFS youth had an increase in self harming behaviours from admission to discharge. The remaining youth had no change in their scores over time. A Wilcoxon Signed Ranks test revealed a statistically significant difference in scores from admission to discharge for both RT youth ($p=.001^*$) and IFS youth ($p=.003^*$).

Table 27: Change in CAFAS Self Harmful Behaviour Subscale Scores Over Time (from Admission to Discharge)

	RT	IFS
Reduction in Severity of Impairment	22 (32.4%)	18 (21.9%)
Increase in Severity of Impairment	6 (8.8%)	3 (3.7%)
No Change in Severity of Impairment	40 (58.8%)	61 (74.4%)
Total	68	82
Wilcoxon Signed Ranks Test	Z= -3.204 p=.001*	Z= -2.941 p=.003*

Figure 12 shows the distribution of scores for RT youth at admission and discharge on the CAFAS Self Harmful Behaviour Subscale. There were significantly more RT youth reported to not engage in self harming behaviours at discharge (82.9%) than at admission (57%).

Figure 12: CAFAS Self Harmful Behaviour Subscale Scores for RT Youth Only

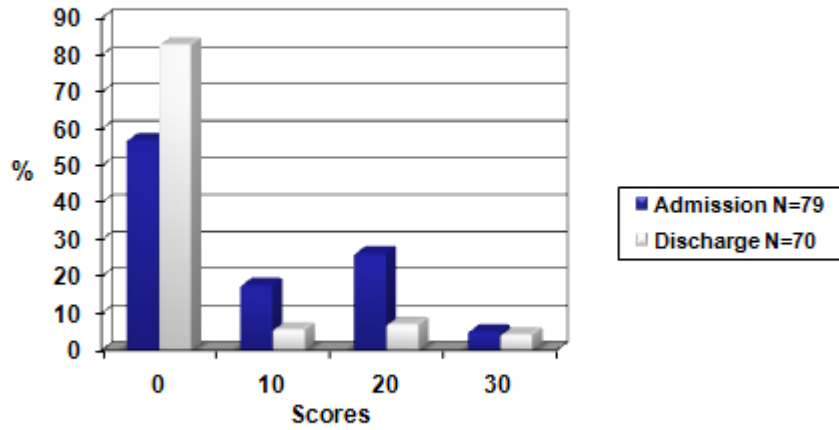
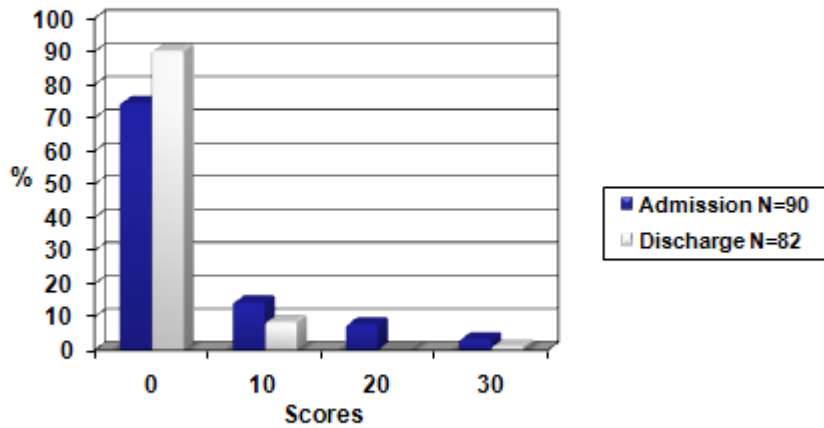


Figure 13 shows the distribution of scores at admission and discharge for IFS youth on the CAFAS Self Harmful Behaviour Subscale. There was a significantly greater proportion of IFS youth reported to have no self harming behaviours at discharge (90.2%) than at admission (74.4%).

Figure 13: CAFAS Self Harmful Behaviour Subscale Scores for IFS Youth Only



(c) BCFPI: SELF HARM

Another measure of self harm included in our analysis was the BCFPI: Self Harm Subscale. We were able to obtain data at admission and discharge retrospectively from paper files. Our questionnaire did not contain questions associated with this measure; therefore, we do not have data on self harming behaviours at follow up. The BCFPI Self Harm Subscale gauges parent/guardian concern about excessive weight loss, suicidal talk, and suicide attempts by youth. This subscale is only completed when there is an elevated score on the BCFPI Managing Mood Subscale. A score is then calculated using the Managing Mood items and the Self Harm items.

i. Admission

At admission there were 69 RT youth and 73 IFS youth with scores on the BCFPI Self Harm Subscale. The mean score for RT youth was 79.78 and 78.65 for IFS youth. Both of these scores were above the clinical threshold of a score of 70 and higher than the 2006 Ontario average score of 68.26. While RT youth had a slightly higher mean score than IFS youth, a t-test showed no statistically significant difference in mean scores between groups ($p=.763$).

Table 28: BCFPI Self Harm Subscale Scores at Admission

Statistics	RT (N=69)	IFS (N=73)	2006 Ontario (N=4918)
Mean	79.78	78.65	68.26
Std. Dev.	20.75	23.57	
T-test	t=.302 df=140 p=.763 (equal variances assumed)		

ii. Discharge

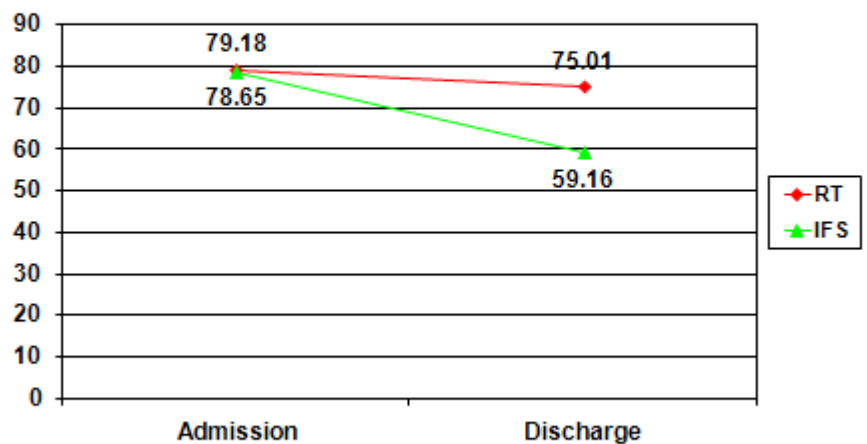
At discharge there were far less youth with scores on the BCFPI Self Harm Subscale: 12 RT youth and 26 IFS youth. Mean scores for this smaller number of youth were lower than mean scores at admission. However, for the 12 RT youth with scores at discharge, their mean score remained clinically elevated (70 or greater). A t-test, summarized in Table 29, revealed there was no statistically significant difference between RT and IFS youth mean scores at discharge ($p=.075$). With such small sample sizes, any statistical comparisons should be regarded with caution.

Table 29: BCFPI Self Harm Subscale Scores at Discharge

Statistics	RT (N=12)	IFS (N=26)
Mean	75.01	59.16
Std. Dev.	29.98	22.07
T-test	t= 1.835 df=36 p=.075 (equal variances assumed)	

Figure 14 shows the mean scores for RT youth and IFS youth at admission and discharge. Due to the small sample sizes at discharge, we did not conduct any analysis that would test for any patterns of change over time. As the BCFPI Self Harm items were administered only if there was an elevated score on the BCFPI Managing Mood Subscale, this scale would not accurately represent improvements over time. For youth with Managing Mood Subscale scores under 70 at discharge, a self harm score would not be calculated.

Figure 14: Average Score on BCFPI Self Harm Subscale



(d) BCFPI: REGULATING ATTENTION

The BCFPI Regulating Attention Subscale is a three item subscale measuring youth “ability to sustain attention, complete tasks, and avoid distractions.” High scores on this subscale suggest problems characteristic of the inattention associated with ADHD. Parents and guardians were asked to rate how frequently youth have problems with staying focused on an activity, failing to finish tasks, or trouble following directions.

i. Admission

At admission, RT youth had a mean score of 71.96 and IFS youth had a mean score of 73.14 on the BCFPI Regulating Attention Subscale. While RT youth had a slightly lower mean score, both of these mean scores were above the clinical score of 70 suggesting the two groups of youth in our sample have mean scores greater than 98% of the normal population. A t-test, summarized in Table 30, shows that there was no statistically significant difference between mean scores for RT youth and IFS youth on this measure ($p=.491$).

Table 30: BCFPI Regulating Attention Subscale Scores at Admission

Statistics	RT (N=74)	IFS (N=82)	2006 Ontario (N=4918)
Mean	71.96	73.14	Not Available
Std. Dev.	10.50	10.88	
T-test	t= -.690 df=154 p=.491 (equal variances assumed)		

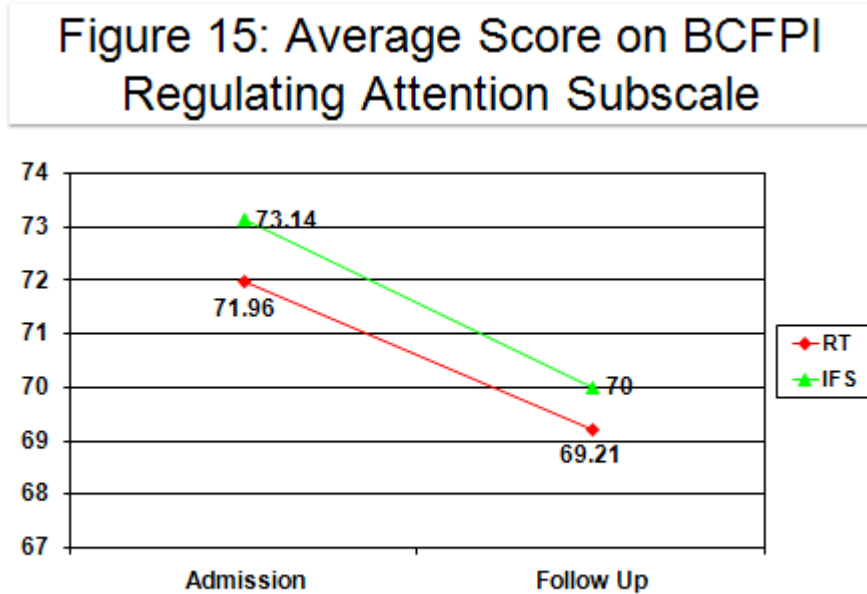
ii. Follow Up

Table 31 shows that RT youth had a mean score of 69.21 on the BCFPI Regulating Attention Subscale at follow up which was a lower score than at admission (71.96). Similarly, IFS youth saw a reduction in their mean score of 73.14 at admission to 70.00 at follow up. There was no statistically significant difference between the mean scores for the two groups at follow up ($p=.628$).

Table 31: BCFPI Regulating Attention Subscale Scores at Follow Up

Statistics	RT (N=100)	IFS (N=101)
Mean	69.21	70.00
Std. Dev.	11.22	11.87
T-test	t= -.485 df=199 p=.628 (equal variances assumed)	

Figure 15 shows the mean scores for RT and IFS youth at admission and follow up on the BCFPI Regulating Attention Subscale. At both admission and follow up, RT youth had lower mean scores than IFS youth on this subscale, however, this difference was not significant. RT and IFS youth saw a similar pattern of change in mean score from admission to follow up.



A repeated measures analysis, summarized in Table 32, revealed that there was a statistically significant difference in scores from admission to follow up for both RT and IFS youth ($p=.001^*$). When we looked for any variation in how the two groups changed over time, there was no significant difference which suggested program type did not have any effect on the pattern of change ($p=.596$).

Table 32: Change in BCFPI Regulating Attention Subscale Scores over Time (from Admission to Follow Up)

	Type III Sum of Squares	df	Mean Square	F	Sig.
Change Over Time	878.504	1	878.504	11.189	.001*
Change by Program	22.190	1	22.190	.283	.596
Error	11463.423	146	78.517		

(e) BCFPI: REGULATING IMPULSIVITY & ACTIVITY LEVEL

Parents and guardians were asked to report how frequently youth jumped from one activity to another, fidgeted, and acted without stopping to think. These items made up the BCFPI Regulating Impulsivity and Activity Level Subscale. A higher score suggested youth were experiencing problems with impulsivity and activity similar to the hyperactive type of ADHD.

i. Admission

At admission, RT youth had a mean score of 68.99 and IFS youth had a mean score of 68.42 on the BCFPI Regulating Impulsivity and Activity Level Subscale. Both of these mean scores were below the clinical threshold of a score of 70. There was no significant difference between mean scores for these two groups of youth at admission ($p=.713$).

Table 33: BCFPI Regulating Impulsivity and Activity Level Subscale Scores At Admission

Statistics	RT (N=73)	IFS (N=82)	2006 Ontario (N=4918)
Mean	68.99	68.42	Not Available
Std. Dev.	9.04	10.02	
T-test	t= .369 df=153 p=.713 (equal variances assumed)		

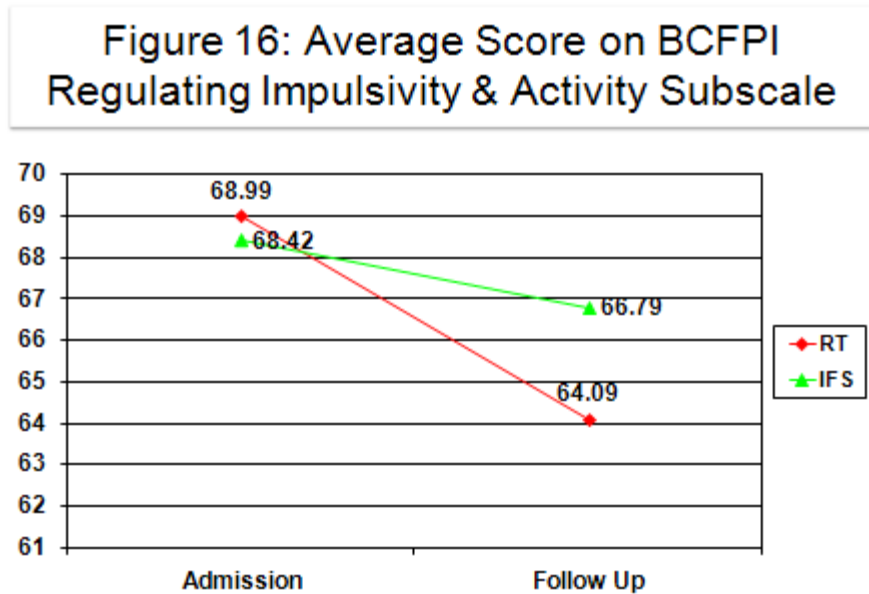
ii. Follow Up

At follow up, RT youth had a mean score of 64.09 and IFS youth had a mean score of 66.79. Again, both of these mean scores were lower than the clinical cut off score of 70. A t-test, summarized in Table 34, did not reveal a statistically significant difference between the mean scores for RT and IFS youth ($p=.097$); however, this trend was approaching significance at the .05 level. RT youth had lower scores than IFS at follow up on the BCFPI Regulating Impulsivity and Activity Level Subscale suggesting they were reported to have fewer problems controlling impulsivity and activity levels.

Table 34: BCFPI Regulating Impulsivity and Activity Level Subscale Scores At Follow Up

Statistics	RT (N=102)	IFS (N=102)
Mean	64.09	66.79
Std. Dev.	11.92	11.15
T-test	t= -1.669 df=202 p=.097 (equal variances assumed)	

Figure 16 shows that at admission RT and IFS youth had similar mean scores on this measure; however, at follow up, RT youth had a significantly lower mean score than IFS youth. There was a small change in mean scores for IFS youth from admission to follow up.



A repeated measures analysis, summarized in Table 35, shows that there was a significant change in scores from admission to follow up for both groups ($p=.001^*$). While there appeared to be a difference in the pattern of change over time between RT youth and IFS youth (RT youth showed a greater reduction in symptoms from admission to follow up), this difference was not significant ($p=.110$).

Table 35: Change in BCFPI Regulating Impulsivity and Activity Level Subscale Scores Over Time (from Admission to Follow Up)

	Type III Sum of Squares	df	Mean Square	F	Sig.
Change over Time	1163.937	1	1163.937	20.125	.000*
Change by Program	149.480	1	149.480	2.585	.110
Error	8559.611	148	57.835		

(f) BCFPI: REGULATING ATTENTION, IMPULSIVITY & ACTIVITY LEVEL

The BCFPI Regulating Attention, Impulsivity and Activity Level Subscale combines items from the previous two subscales (Regulating Attention and Regulating Impulsivity and Activity Level). A high score is indicative of problems with overactive and impulsive behaviour.

i. Admission

At admission, RT youth had a mean score of 72.25 and IFS youth had a mean score of 72.64 on the BCFPI Regulating Attention, Impulsivity and Activity Level Subscale. These scores were similar to one another and a t-test, summarized in Table 36, revealed no significant difference between mean scores for the two groups of youth ($p=.746$). Both mean scores were above the clinical cut off score of 70. Furthermore, both of these mean scores were higher than the 2006 Ontario average score of 65.15 on this measure.

Table 36: BCFPI Regulating Attention, Impulsivity and Activity Level Subscale Scores at Admission

Statistics	RT (N=75)	IFS (N=84)	2006 Ontario (N=4918)
Mean	72.25	72.64	65.15
Std. Dev.	9.58	10.08	
T-test	t= -.251 df=157 p=.802 (equal variances assumed)		

ii. Follow Up

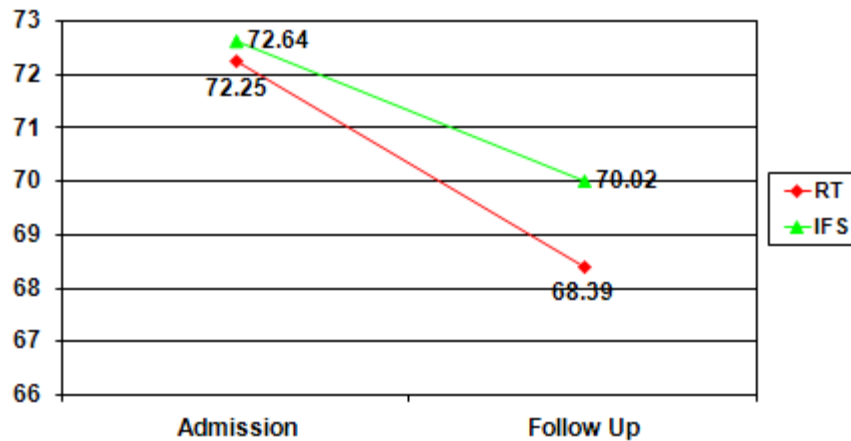
At follow up, both groups saw a reduction in their mean scores on this subscale. Table 37 shows that RT youth had a mean score of 68.39 and IFS youth had a mean score of 70.02 at follow up. While RT youth appeared to evidence a greater improvement in mean scores over time than IFS youth, this difference was not statistically significant ($p=.025^*$).

Table 37: BCFPI Regulating Attention, Impulsivity and Activity Level Subscale Scores at Follow Up

Statistics	RT (N=103)	IFS (N=104)
Mean	68.39	70.02
Std. Dev.	11.65	11.53
T-test	t= -1.014 df=205 p=.312 (equal variances assumed)	

Figure 17 shows that at admission, RT and IFS youth had similar mean scores on the BCFPI Regulating of Attention, Impulsivity and Activity Level Subscale. At follow up, however, RT youth appeared to have a lower mean score than IFS youth indicating less difficulty regulating attention and hyperactivity.

Figure 17: Average Score on BCFPI Regulation of Attention, Impulsivity & Activity Subscale



We looked for differences in the patterns of change over time for each group using a repeated measures analysis. Table 38 shows that there was a statistically significant change over time in scores on the BCFPI Regulating Attention, Impulsivity and Activity Level subscale for both groups ($p=.001^*$). The effect of program type on the pattern of change from admission to follow up, however, was not significant ($p=.301$).

Table 38: Change in BCFPI Regulating Attention, Impulsivity and Activity Level Subscale Scores Over Time (from Admission to Follow Up)

	Type III Sum of Squares	df	Mean Square	F	Sig.
Change over Time	1243.848	1	1243.848	20.69	.000*
Change by Program	64.710	1	64.710	1.077	.301
Error	9255.446	154	60.100		

(g) BCFPI: EXTERNALIZING BEHAVIOUR COMPOSITE SCALE

The BCFPI Externalizing Behaviour Composite Scale is calculated using items from three mental health subscales. They are the Regulating Attention, Impulsivity, and Activity Level Subscale, the Cooperativeness Subscale, and the Conduct Subscale. Results from the latter two subscales are summarized in our social connections and delinquent activities life domain reports. The BCFPI Externalizing Behaviour Composite Scale results are presented here, as part of the mental health life domain results, as the scale is an overall measure of the presence of externalizing mental health behaviours. Scores for this composite scale are only calculated if all contributing subscales are available.

i. Admission

At admission, RT youth had a mean score of 82.49 and IFS youth had a mean score of 81.41 on the BCFPI Externalizing Behaviour Composite Scale. A t-test, summarized in Table 39, shows no significant difference between mean scores for RT and IFS youth at admission ($p=.521$). Both of these mean scores were above the clinical threshold score of 70 and well above the 2006 Ontario average score of 69.87.

Table 39: BCFPI Externalizing Behaviour Composite Scale Scores at Admission

Statistics	RT (N=75)	IFS (N=83)	2006 Ontario (N=4918)
Mean	82.49	81.41	69.87
Std. Dev.	10.03	10.93	
T-test	t= .643 df=156 p=.521 (equal variances assumed)		

ii. Follow Up

Table 40 shows that both RT and IFS youth experienced a reduction in mean scores on this composite scale at follow up. RT youth had a mean score of 72.18 in contrast to a higher mean score of 82.49 at admission. While not as large of a difference, IFS youth had a mean score

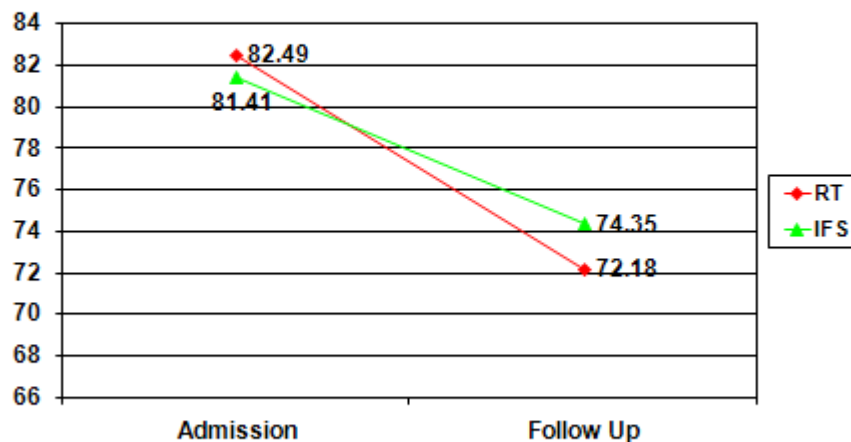
of 74.35 at follow up which was lower than 81.41 at admission. T-test results showed no significant difference at the alpha .05 level in mean scores at follow up between the two groups (p=.233).

Table 40: BCFPI Externalizing Behaviour Composite Scale Scores at Follow Up

Statistics	RT (N=102)	IFS (N=104)
Mean	72.18	74.35
Std. Dev.	13.90	12.10
T-test	t= -1.197 df=204 p=.233 (equal variances assumed)	

Figure 18 shows that RT and IFS youth had similar mean scores at admission on the BCFPI Externalizing Behaviour Composite Scale. At follow up, however, RT youth showed a lower mean score than IFS youth.

Figure 18: Average Score on BCFPI Externalizing Behaviour Composite Scale



We used a repeated measures analysis to test for any significant patterns of change in scores for RT and IFS youth over time, as well as to test for any effect that type of program may have had on the patterns of change. Table 41 shows that there was a statistically significant change in scores over time (p=.000*); however, program type had no significant effect on this change (p=.170). Despite the observation that RT youth had a lower mean score than IFS youth

at follow up, both groups showed similar improvements on the BCFPI Externalizing Behaviour Composite Scale over time.

Table 41: Changes in BCFPI Externalizing Behaviour Composite Scale Scores Over Time (from Admission to Follow Up)

	Type III Sum of Squares	df	Mean Square	F	Sig.
Change over Time	6133.520	1	6133.520	62.235	.000*
Change by Program	187.565	1	187.565	1.903	.170
Error	14980.334	152	98.555		

(h) BCFPI: TOTAL PROBLEMS COMPOSITE SCALE

The BCFPI Total Problems Composite Scale consists of items from both the internalizing and externalizing behaviours composite scales. This scale can only be calculated when all of the mental health subscales are available.

i. Admission

At admission, RT youth had a mean score of 79.08 and IFS youth had a mean score of 78.60 on the BCFPI Total Problems Composite Scale. A t-test, summarized in Table 42, revealed no significant difference between the mean scores for RT and IFS youth on this measure at admission ($p=.798$).

Table 42: BCFPI Total Problems Composite Scale Scores at Admission

Statistics	RT (N=71)	IFS (N=82)	2006 Ontario
Mean	79.08	78.60	69.13
Std. Dev.	10.90	12.16	
T-test	t= .256 df=151 p=.798 (equal variances assumed)		

ii. Follow Up

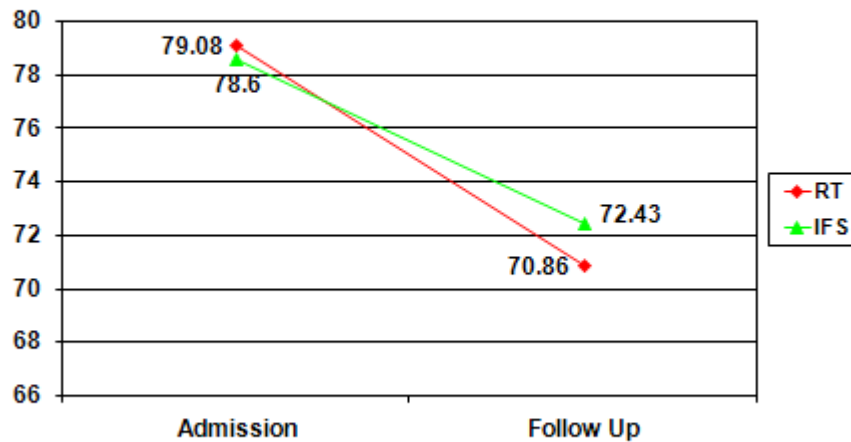
Table 43 shows that both RT and IFS youth experienced a decrease in their BCFPI Total Problems Composite Scale mean scores from admission to follow up. At follow up RT youth had a mean score of 70.86 in contrast to a mean score of 79.08 at admission. Similarly, IFS youth had a mean score of 72.43 at follow up which was lower than their mean score of 78.60 at admission. While RT youth appeared to have a lower mean score at follow up than IFS youth, the difference in mean scores between the two groups was not statistically significant ($p=.371$).

Table 43: BCFPI Total Problems Composite Scale Scores at Follow Up

Statistics	RT (N=103)	IFS (N=104)
Mean	70.86	72.43
Std. Dev.	12.93	12.38
T-test	t= -.896 df=205 p=.371 (equal variances assumed)	

Figure 19 shows the mean scores for both groups at admission and follow up. RT youth and IFS youth showed a similar pattern of reduction in scores over time suggesting improvements in total mental health.

Figure 19: Average Score on BCFPI Total Problems Composite Scale



A repeated measures analysis, summarized in Table 44, showed that both groups evidenced similar improvements on the BCFPI Total Problems Composite Scale over time. There was a statistically significant change in scores over time ($p=.000^*$); however, program type had no significant effect on this change.

Table 44: Changes in BCFPI Total Problems Composite Scale Scores Over Time (from Admission to Follow Up)

	Type III Sum of Squares	df	Mean Square	F	Sig.
Change over Time	4133.281	1	4133.281	44.718	.000*
Change by Program	116.593	1	116.593	1.261	.263
Error	13772.114	149	92.430		

Well Being

While there were many indicators of youth mental health, there were two subscales of the KINDL Quality of Life Scale that seemed to measure a more general sense of health and well being. These were the Self Esteem subscale and the Physical Health subscale.

(a) KINDL: QUALITY OF LIFE—SELF ESTEEM SUBSCALE

i. Admission

When asked to reflect back on their child’s self esteem in the few weeks leading up to service involvement, parents reported only a moderate rating of quality of life in the area of youth self esteem. The mean score for RT youth was 2.23 and 2.37 for IFS youth. Table 45 shows there was no significant difference in mean scores for the two groups at admission ($p=.180$). The sample size for RT youth at admission on this scale was smaller than the IFS youth sample as there was a number of child welfare guardians who did not have direct observations of how youth were functioning prior to admission (i.e. they were not their children’s service worker at the time of admission).

Table 45: KINDL Quality of Life—Self Esteem Subscale Scores at Admission

Statistics	RT (N=87)	IFS (N=103)
Mean	2.23	2.37
Std. Dev.	.716	.733
T-test	t= -1.345 df= 188 p=.180 (equal variances assumed)	

ii. Follow Up

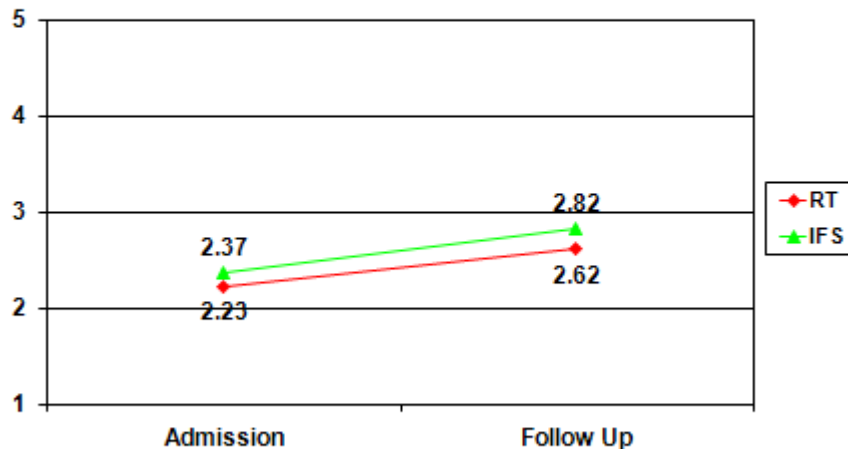
Table 46 shows an increase in mean scores for both RT and IFS youth from admission to follow up on the KINDL Quality of Life—Self Esteem Subscale. A t-test revealed that there was no significant difference between mean scores for RT and IFS youth at follow up ($p=.081$). However, this trend was approaching significance and may have reached significance at the $\alpha=.05$ level with a larger sample.

Table 46: KINDL Quality of Life—Self Esteem Subscale Scores at Follow Up

Statistics	RT (N=99)	IFS (N=99)
Mean	2.62	2.82
Std. Dev.	.813	.845
T-test	$t = -1.756$ $df = 196$ $p = .081$ (equal variances assumed)	

Figure 20 shows the mean scores for RT and IFS youth at both admission and follow up. While both groups shared similar levels of self esteem at admission, IFS youth were reported to have slightly higher levels of self esteem than RT youth at follow up.

Figure 20: Average Score on KINDL Quality of Life-Self Esteem Subscale



We used a repeated measures analysis to test for any significant patterns of change in scores for RT and IFS youth over time, as well as to test for any effect that type of program may have had on the patterns of change. Table 47 shows that there was a statistically significant change in scores over time ($p=.000^*$); however, program type had no significant effect on this change ($p=.685$). Despite the observation that IFS youth had a higher mean score than RT youth at follow up, both groups showed similar improvements on the KINDL Quality of Life—Self Esteem Subscale over time.

Table 47: Changes in KINDL Quality of Life—Self Esteem Subscale Scores Over Time (from Admission to Follow Up)

	Type III Sum of Squares	df	Mean Square	F	Sig.
Change over Time	15.652	1	15.652	36.537	.000*
Change by Program	.071	1	.071	.166	.685
Error	76.682	179	.428		

(b) KINDL: QUALITY OF LIFE—PHYSICAL SUBSCALE

i. Admission

To assess youth quality of life in the area of physical health at admission, parents were asked to reflect back to how their child was feeling physically in the few weeks prior to service involvement. Table 48 shows that the quality of life—physical health subscale mean score for RT youth was 3.42 and 3.03 for IFS youth. A t-test revealed a statistically significant difference in mean scores between the two groups at admission. RT youth were reported to have higher quality of life in the domain of physical health than IFS youth.

Table 48: KINDL Quality of Life—Physical Health Subscale Scores at Admission

Statistics	RT (N=87)	IFS (N=104)
Mean	3.42	3.03
Std. Dev.	.988	1.01
T-test	t= 2.668 df=189 p=.008* (equal variances assumed)	

ii. Follow Up

At follow up, both RT and IFS youth were reported to have greater quality of life in the domain of physical health than at admission. From Table 49 we see that RT youth had a mean score of 3.70 and IFS youth had a mean score of 3.44. Similar to admission, a t-test revealed a statistically significant difference between mean scores for RT youth and IFS youth on the

KINDL Quality of Life—Physical Health Subscale. RT youth were reported to enjoy a higher quality of physical health than IFS youth.

Table 49: KINDL Quality of Life—Physical Health Subscale Scores at Follow Up

Statistics	RT (N=100)	IFS (N=99)
Mean	3.70	3.44
Std. Dev.	.930	.883
T-test	t= 2.046 df= 197 p=.042* (equal variances assumed)	

Figure 21 shows the mean scores for RT and IFS youth at admission and follow up on the KINDL Quality of Life—Physical Health Subscale. At both admission and follow up, RT youth were reported to have greater quality of life in the domain of physical health than IFS youth.

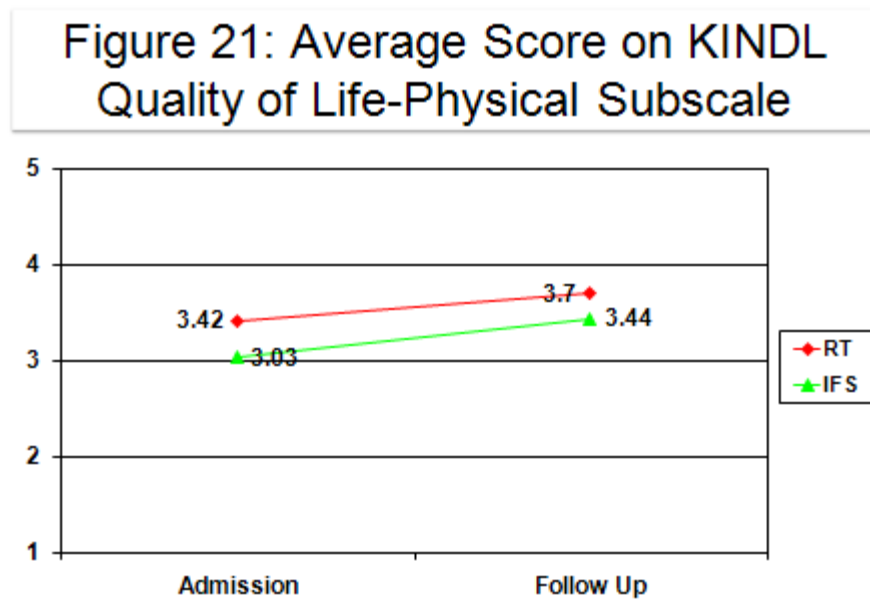


Table 50 summarizes the repeated measures analysis used to assess patterns of change on KINDL Quality of Life—Physical Health subscale scores over time. The analysis revealed a significant change in scores from admission to follow up for both groups ($p=.000^*$). While RT youth were reported to have higher quality of life in this domain than IFS youth, the repeated measures analysis showed no statistically significant difference between the patterns of change over time for RT and IFS youth ($p=.466$).

Table 50: Changes in KINDL Quality of Life—Physical Health Subscale Scores Over Time (from Admission to Follow Up)

	Type III Sum of Squares	df	Mean Square	F	Sig.
Change over Time	10.362	1	10.362	18.048	.000*
Change by Program	.307	1	.307	.534	.466
Error	102.773	179	.574		

Youth Perspectives on Health & Well Being

This section provides a short summary of youth perspectives on their health and well being. Youth were asked “How happy or unhappy do you feel about how healthy you are?” In general, youth interpreted this question as an assessment of physical health and most youth responded that they felt fairly healthy. However, several youth did speak about other health related concerns during the interview including mental health concerns such as depression, anxiety and managing anger and lifestyle concerns such as alcohol, drugs and street lifestyles.

Physical Health

In terms of physical health, the vast majority of youth stated that they felt physically healthy. Six youth raised concerns about their weight, four were concerned about eating habits and sleep and four about frequent illness. Smoking was identified as a health concern by five youth. In a couple of cases, these physical health concerns appeared to interfere in the youth’s daily living:

Because I don’t know what’s wrong and I had to go to the hospital a few weeks ago. Because I had a bacterial infection a couple years ago and they thought it might be back, but it wasn’t, and I have no idea what’s wrong. [...]For the last six months, I’ve been feeling sick, not feeling sick, feeling sick, not feeling sick.[...] It gets annoying to become sick, and not, and become sick and not sick. And I’ve missed a little bit of school because of it. [IFS-1]

Well, I’m just not. Like, I don’t do—it’s probably still right now, I smoke, obviously that’s not healthy. I don’t know, I don’t... I’m just not. I have such poor, like, habits, getting up in the morning, no. I could sleep all day, I could just sit around my house all day, I don’t do anything. [RT-1]

On the opposite end of the spectrum, three youth stated that they felt very healthy and emphasized physical fitness was important to them.

The most common health concerns mentioned through the course of interviews were emotional health concerns. A number of youth made reference to mental and emotional health

concerns for which they had received some treatment but that they continued to struggle. The issues named included depression, attention deficit disorder, bulimia, anxiety, anger management difficulties and bi-polar disorder. In many cases youth reported that these mental or emotional health concerns were much improved and/or were being managed well with medication and in a few cases these issues still seemed to be of significant concern.

Depression

A small number of youth from each group, three IFS youth and four RT youth, talked about depression or feeling down sometimes and identified that this was an issue with which they struggled. For most of these youth, depression seemed to be an ongoing concern. The following quotes illustrate how some of these youth have experienced depression and are managing with depression:

Yeah, just not really feeling depressed lately, but just not as happy as I used to be, I don't know.[...] Just... I don't know, just really down sometimes.... Yeah. But at other times I can be happy. [IFS-2]

[Q. Yeah. How are you handling it?] Just like when I get depressed, I know it won't last forever. I'll just like sit back and not let it affect my life. [IFS-3]

I find that I'm constantly miserable which really disappoints me. You know, I try to be happy but I can't fake it every day and I don't want to be something I'm not. I can't kiss everybody's ass and live up to everybody's expectations and just be happy about all the things that y'know, don't happen the way they're supposed to, like I get stuck in these situations and I wish I could just accept and see the silver lining which I try to every day, but it's quite hard, so ...[RT-2]

I have this disease called separation disorder, if I'm away from my family for a long time, I go into depression. [RT-3]

Well, I get very depressed. Like, I'm on anti-depressants, something called Luvox, I don't know if that matters. Yeah, and I was on Celexa and yeah, and then the getting kicked out of my—....So, that time of my life was really hard for me, so I had to like, go to group homes...I don't know, I remember one of the counselors or workers or whatever there said, like, down the road, this will be a very small point in your life and I think she's right actually. I don't think about it too much now, really, but uh... yeah. [IFS-4]

This same youth also talked about self-esteem and physical health concerns accompanying the depressed feelings:

Um, I don't know, like, I don't have a lot of self-confidence. But... like I'm happy with my family and my house and stuff, so yeah, I'd say I'm... I'm pretty happy, I just don't know if I'm happy with myself.[...] Um, yeah, like I'm... like I just... I don't know, I don't think there's a whole lot of good things about me and stuff. And

uh, I just don't ... like ... it's like... it's kind of like life is one big joke for me. It's kind of like whenever something really good happens, it kind of like, gets sorta snatched away, y'know what I mean? So that's why I think I get kind of depressed, but yeah, I'm happy with the atmosphere around me, I think it's just myself I need to work on.[...] Um, oh, my uh, parents often tell me I don't eat well, and I probably don't y'know, I'll like, uh, like... I don't get a whole lot of sleep at nights, so that worries them. [IFS-4]

The following youth reported that her moods are impacted by the type of drugs she uses. Here she describes the interactions between her depression, drug use and self harming behaviors:

I don't know, like, sometimes I'll get really depressed and I'll, like, cut myself. But fuckin' I don't cut myself for like what I used to. Like, I used to be all, like, fucking emotistic, I hated it. But, fucking, now I do it so that, like, I don't do drugs and then I get all pissed off at myself for hurting myself and then I go do drugs. [RT-4]

For the small number of youth who discussed depression, this mental health concern seemed to be an issue that interfered in these youths' everyday functioning. However, the fact that the vast majority of youth did not talk about depression or feeling down suggests that it may have been a concern for a minority of youth.

Anxiety

Of the IFS group, five youth talked about anxiety and only two youth from the RT group reported concerns about anxiety. Thus, anxiety also appears to be a concern for only a minority of study youth. Of the seven youth who reported concerns with anxiety, five youth reported currently struggling to manage their anxiety. The other two youth framed their challenges with anxiety as mostly having occurred in the past. One of these youth also struggled with depression:

Yeah. I just got in the habit... like I did it once, or twice, and I just got into the habit and everyone just pushing on me to keep going and then everyone pushing on me to keep going and then all the stress of getting all my stuff together and failing was even worse so I just kept staying home because I was having panic attacks. [Q....?] .. I just got really stressed out and I was to the point of crying. And I just couldn't do it and I just ran home half the time Yeah. [IFS-5]

Um, just getting back on schedule and stuff, but the first time they caught me with anxiety and stuff like that. [Q....And how are those things going for you now?]Pretty well.[...] I was a depressed and stuff and everyone was worried. [...And are you feeling depressed now?] No, hardly ever, now I'm medicated. [Q. And what—how has that made a difference in your life?] Mmm... just made me from going and having panic attacks and stuff.[...]Helps me get up in the morning too. [...] [How do you feel about your depression then?]. Pretty good, I can handle it.[Q. Yeah. How are you handling it?] Just like when I get depressed, I know it won't last forever. I'll just like sit back and not let it affect my life. [IFS-6]

One youth from the RT sample talked about facing a bipolar disorder:

I think I'm fairly healthy except for the mental diseases I have, like bipolar and stuff.[...] [Q. Right. What's it like having bipolar?] Not fun. [...] Being on pills all your life. [RT-5]

Difficulties with attention deficit disorder were reported by two IFS youth and one RT youth. The following comment suggest that this youth has come to accept his need to take medication to help him focus:

Um not really. There's... there's also a this medication I take since I have like ADHD, since I was like three or whenever I was in school, and um I take uh Dexedrine (?) and it just helps me concentrate..... Between taking it and not taking it. It just...the only difference is that I focus more....[Q....do you have any thoughts about taking meds?] Uh sometimes it really annoys me and then other times I feel that it's necessary. [IFS-7]

Between depression, bulimia, attention deficit disorder, anxiety and bipolar disorder, there was about 20% of IFS youth and 24% of RT youth who named these issues as current health concerns. About half the youth talked about these emotional issues described them as not being a significant concern at present, and usually they named medication as being helpful.

Regulation of Anger

Managing anger and intense emotions was named as a concern for a somewhat smaller number of youth. Five IFS youth and five RT youth talked about having difficulty managing anger. Four youth talked about some improvement in their ability to manage anger as the following comments suggest:

Well, I did a couple of anger management courses a couple of years back and I kind of used steps from that and my mom kind of helps me out with that too. (Mmhm) So... [Q. And what sorts of steps did you learn?] Pretty much just to like, walk away, which is pretty tough for me (yeah?) because I don't like people thinking they're better than me so they can walk all over me. I was told to like, deep breathe or whatever or just think in your head who it's coming from or whatever. My mom taught me that before you get in a fight, there's like, battles worth fighting and there's ones that are not worth fighting, so choose your battles wisely. And she told me that like, my mom helps me out with like, most of my problems. [RT-1]

Outbursts.[...][Q. And, when you have outbursts, is it like, angry or sad or what kind of outbursts do you have?] I guess... I'm not sure. [Q. Do they happen a lot, (name of youth)?] Not really, I try to control them. [Q. Yeah? Is it hard to control them?] Sometimes. [IFS-1]

For the other six youth, it appeared that managing anger continued to be a significant challenge as the following comments seem to indicate:

No, I have limited patience. I'd go and it's a baby crying and we're standing in a restaurant and the baby has about a minute to shut up or I'm going to freak out because it drives me crazy and that cat right now, no, I just don't have a lot of patience. Things annoy me and if I'm trying to cut something and it's not working, I get impatient with it and when things don't work, I don't have the patience for it. [Q. So how do you react when your patience runs out?] I might swear, or I'll get frustrated or I might take it out on someone else. Things like that. [IFS-2]

Just like, she says I'm going psychotic and I start screaming and stuff because I'm so stressed out, like, I can't help it... And that like happened twice last week and then I stopped. [Q. So there's times when you get so mad and you just can't help it?] (assumed nod)[...] [Q. It's hard for you?] Yeah. [IFS-3]

All the stuff I've been through, they just make stupid comments and it's annoying all the time, because most of my... the majority of my emotions change into anger.[...]...the services I went to, kind of staff worked on some things, the program, like the whole anger stuff it didn't work, like what they try to teach you, it doesn't work. [Q. How come?] I don't know, telling you how to release your anger, because you didn't figure out your own way to get rid of your anger, not telling someone else telling you how to. [RT-2]

What do you like most about having a girlfriend? I don't know. I have someone to talk to when I'm angry. [RT-3]

These quotes identify anger as a significant concern for this small group of youth. Anger management may be a more minor concern for some others as suggested in some of the other domains.

Substance Use

Alcohol and drug use was talked about by nine different youth. For four of these youth, the issue of alcohol and drug use was framed in the past. These youth identified past substance use as a concern but reported that they were not currently using. Still, some of these youth reported being newly recovered and were working at staying away from drugs and alcohol:

It's just like—I was into alcohol and drugs and I cannot—like, I couldn't just put it down and just stop, I always had to drink or do drugs, so this program is—it's a 12-step thing and it helps you deal with that and it helps you around with life. [IFS-1]

Uh, I used to do drugs, just because a friend influenced me, so I used to, so I don't even want to. [RT-1]

Yeah, it was the first time I ever tried drugs, due to peer pressure and pretty much, I liked it and just kind of wanted it, just kept going, tried different things and... I stick to staying away from them now, not even once in a while, not going to let them mess up my life again. [RT-2]

Current active drug use was described by five study youth. These youth were generally quite candid and detailed about the nature of their drug use, as the following comments suggest:

...do everything except for needles...[...] [Q. And how much drugs would say you do on a given day, is it at night you do the drugs or during the day?] Both. [...] Quite a bit. [...] No. I'm pretty much in control of what I do. I know what I'm doing, how much I'm taking and when I'm going to stop. [RT-3]

What kind of drugs do you do? Just smoke weed... Yeah. And other stuff. [RT-4]

And then I have guy friends from our school too, and then like guys from like (city 1) and (city 2), some girlfriends from (city 1), (city 2) come over to drink and smoke weed. [Q. Ok is that what you guys normally do when you hang out?] Yeah. [IFS-2]

I like it if I'm with certain people. I like to get stoned, um that's even during a school day thing, like lunch hour, just so I can pay more attention. [RT-5]

This youth describes her extensive history of drug use, her struggle to stop using and conflict with her mother related to her drug use:

My mother because she thinks if I quit drugs, bam, they're gone just like that. It's not easy, I was a coke head for four years and I'm still going strong. I've done meth, I've done acid, I've done shrooms, I've done DNT, I've done liquid LSD, I've done fuckin' heroin, I've done fucking speed, I've done fucking everything and like fucking I'm not done with it yet but she doesn't understand that. I told her before when I'm ready to quit I'll quit otherwise there's no fucking point to it. [...] And she doesn't understand that and me trying to cut back to just pot isn't really going to work. Like it's hard. [RT-6]

Aside from a few youth identifying specific emotional and physical health concerns, overall, study youth spoke in positive terms about their current and long term emotional and physical health. The language youth used to describe their lives conveyed a hopeful message about how they were doing emotionally and in terms of self-esteem and confidence. The following youth spoke optimistically about themselves and their future:

Very happy. [Q...] Because I like the way my life is going now. I like everybody in it, like everything's that in it, so... My mom, my brother, everything around. [IFS-1]

I don't know how healthy I am... but very happy. [IFS-2]

I feel pretty good about what's going to happen. [IFS-3]

Um, well, just everything, I don't know, I don't feel bad about anything that's going on in my life right now or anything like that so...[IFS-4]

I'm content being... me. [RT-1]

Everything's going really well, just having... if you would ask me the same question last year, I would probably tell you about a 3, everything has just turned around and I'm so much happier. [RT-2]

These quotes suggest that this group of youth believed they were faring quite well at the time of our interview.

While youth interviews did not explore health and well being extensively and many youth shared little about health concerns, a sizeable segment of youth, about one-quarter of each sample, talked about their emotional and mental health as a concern. Most youth did not identify any significant physical health concerns. Several youth reported drug and alcohol use that appeared potentially problematic. Optimistic commentary from some youth suggested that a group of these youth felt they were faring reasonably well in overall mental, emotional and physical health.

Parent Health & Well Being

Previous research by the Partnerships for Children and Families Project suggested that parental health and well being was an important consideration in understanding the daily lives of families with an emotionally and/or behaviourally challenged child or youth. Prior research indicated that a significant proportion of parents were struggling with increased stress and depression before their child entered mental health treatment. To increase our understanding of parents' experiences of caring for a child with emotional and/or behavioural difficulties, we included a number of standardized measures to assess parental health and well being. Where we had information at admission and follow up, we comment on any patterns of change over time.

Mental Health

Measures of parent mental health included:

- BCFPI: Informant Mood
- World Health Organization (WHO) Quality of Life Brief Version—Psychological Subscale
- How much do you enjoy life? (Single item)
- To what extent do you feel your life to be meaningful? (Single item)

(a) BCFPI: INFORMANT MOOD

The 6 item BCFPI: Informant Mood scale is derived from the 20 item Centre for Epidemiologic Studies—Depression scale and is a measure of informant (parents) levels of depressive feelings and behaviours. At admission, there were very few scores available for this measure as it was not often administered in its entirety and a scale score could not be calculated. At follow up, however, we have scores for 48 RT parents and 101 IFS parents which we report here.

Table 50 shows the distribution of RT and IFS parent responses for the 6 items that make up this scale. We noted the following patterns:

- More than half of all parents in both groups reported no problems with their appetite.
- Almost 19% of RT parents reported having trouble keeping their mind on what they were doing 5 or more days a week. The majority of RT parents reported only experiencing this problem less than one day a week (37.5%) followed by 1-2 days a week (25%). The largest percentage of IFS parents (41%) reported being distracted less than one day a week followed by 26% of IFS parents having trouble concentrating 1-2 days a week.
- RT parents' reported feelings of depression divided the group on either end of the response continuum with 50% of parents feeling depressed less than one day a week and 31.3% feeling depressed 5 or more days a week. More IFS parents reported experiencing

some feelings of depression; however the frequency was more varied for this group with 27.7% of IFS parents feeling depressed 1-2 days, 13.9% feeling depressed 3-4 days, and 13.9% feeling depressed 5 or more days.

- The majority of RT and IFS parents reported disruption in their sleep. Approximately 79% of RT parents and 81% of IFS parents said that their sleep was restless anywhere from 1-2 days or 5 or more days of the week.
- Feelings of sadness were reported to occur more frequently than “less than one day” for 60.4% of RT parents and 65.3% of IFS parents.
- Approximately 46% of RT parents and 50% of IFS parents reported not being able to “get going” less than one day a week suggesting that just as many parents were struggling to “get going” at least a few days a week.

Table 50: Distribution of Responses for Individual Items on the BCFPI: Informant Mood Scale at Follow Up

Item	Program	N	Less than 1 day	1-2 days	3-4 days	5 or more days
Your appetite was poor.	RT	48	53.6%	22.9%	8.3%	12.5%
	IFS	101	59.4%	17.8%	14.9%	7.9%
You had trouble keeping your mind on what you were doing.	RT	48	37.5%	25%	18.8%	18.8%
	IFS	100	41%	26%	18%	15%
You felt depressed.	RT	48	50%	6.3%	12.5%	31.3%
	IFS	101	44.6%	27.7%	13.9%	13.9%
Your sleep was restless.	RT	48	20.8%	27.1%	12.5%	39.6%
	IFS	101	18.8%	25.7%	23.8%	31.7%
You felt sad.	RT	48	39.6%	20.8%	12.5%	27.1%
	IFS	101	34.7%	32.7%	20.8%	11.9%
You could not “get going.”	RT	48	45.8%	22.9%	12.5%	18.8%
	IFS	101	49.5%	26.7%	11.9%	11.9%

Table 51 shows the mean scores for RT and IFS parents on the BCFPI Informant Mood Scale at follow up. RT parents had a mean score of 64.84 and IFS parents had a mean score of 62.37. Both mean scores were below the level of clinical concern (score of 70). There was no statistically significant difference in mean scores between the two groups at follow up ($p=.415$).

Table 51: BCFPI Informant Mood Scale Scores at Follow Up

Statistics	RT (N=48)	IFS (N=101)
Mean	64.84	62.37
Std. Dev.	17.93	15.42
T-test	$t= .820$ $df= 81.146$ $p=.415$ (equal variances not assumed)	

(b) WHOQOL—BREF: PSYCHOLOGICAL HEALTH SUBSCALE

The WHO Quality of Life—Psychological Health Subscale is a 6 item measure of psychological quality of life that incorporates assessments of self esteem, thinking, bodily appearance, and negative feelings (Hawthorne, Herman, & Murphy, 2006). This subscale is part of the 26 item WHO-Quality of Life Scale (Brief version) that was administered at follow up.

At follow up RT parents had a mean score of 57.89 and IFS parents had a mean score of 60.76 on the psychological subscale of the WHOQOL—BREF measure. Table 52 shows that there was no significant difference between scores for each group ($p=.364$). However, mean scores for both RT and IFS parents were statistically significantly lower than the mean score (71.1) for a comparison group of 33 females aged 40-49 in the general population indicating a diminished psychological health quality of life (*RT Parents* $t=-4.806$, $df=47$, $p=.000^*$; *IFS Parents* $t=-5.946$, $df=100$, $p=.000^*$). This comparison group was relevant as the average age of respondents in our sample was 41 for RT parents and 40.83 for IFS parents and over 95% were female.

Table 52: WHOQOL-BREF Psychological Subscale Scores at Follow Up

Statistics	RT (N=48)	IFS (N=101)
Mean	57.89	60.76
Std. Dev.	19.03	17.46
T-test	$t=-.910$ $df= 147$ $p=.364$ (equal variances assumed)	

From the psychological subscale of the WHOQOL—BREF measure, parents were asked to reflect on how much they enjoyed life in the few weeks leading up to participating in services. Figure 22 shows the distribution of RT parents’ responses for this question both retrospectively (at admission) and at follow up. At admission, only 6% of parents reported enjoying life more

than a “moderate amount.” At follow up, the percentage of RT parents reporting enjoying life either “very much” or an “extreme amount” increased to 29%.

**Figure 22: How much do you enjoy life?
RT Parents Only (N=48)**

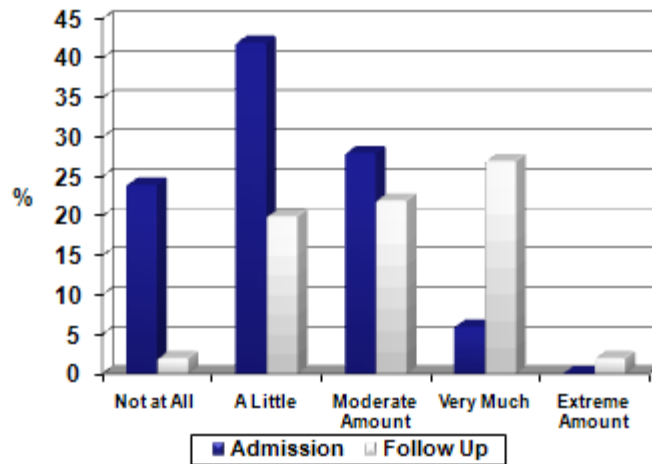
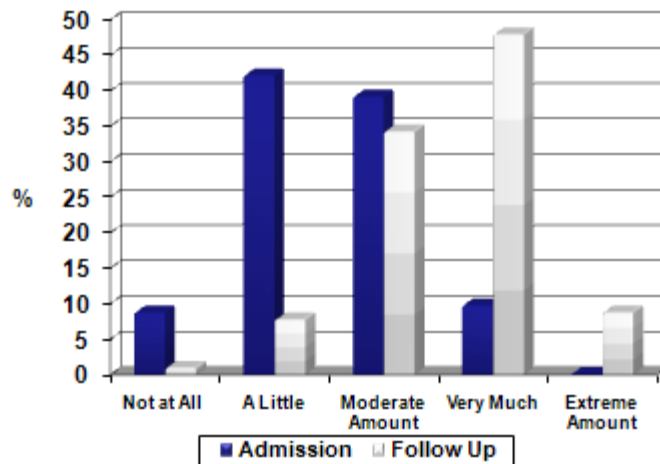


Figure 23 shows IFS parents’ responses to how much they enjoyed life both at admission and follow up. More IFS parents were reporting greater enjoyment at follow up than at admission; however, the proportion of parents reported to enjoy life only a “moderate amount” remained somewhat the same over time.

**Figure 23: How much do you enjoy life?
IFS Parents Only (N=102)**



Parents were also asked to reflect back to the few weeks prior to becoming involved with services and indicate the extent to which they felt their life to be meaningful. Figure 24 shows the distribution of responses to this question for RT parents at both admission (answered retrospectively) and follow up. At admission, the majority of RT parents reported feeling that their life was meaningful a “moderate amount” or less. At follow up, RT parents reported greater meaning in their lives than at admission with over half of parents feeling that their lives were meaningful either “very much” or an “extreme amount.”

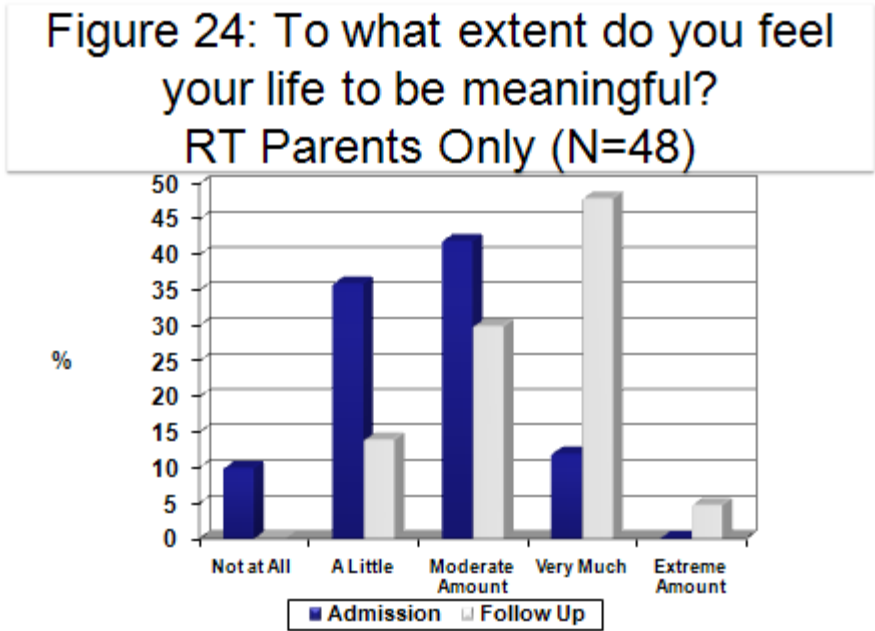
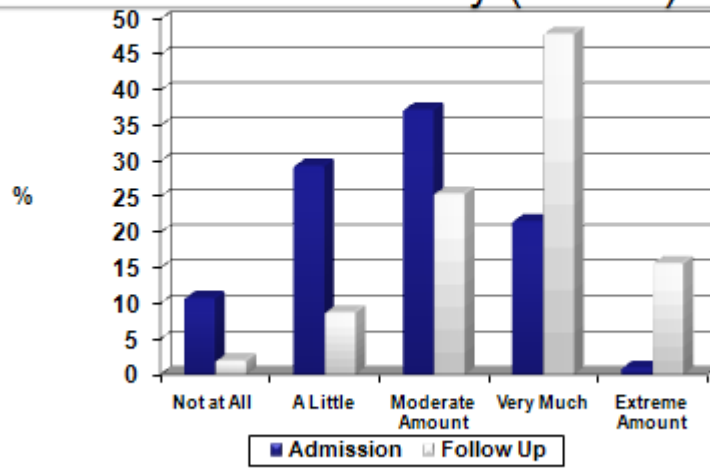


Figure 25 shows the distribution of IFS parents' responses to how much they felt their lives to be meaningful both at the time of admission and follow up. Approximately 40% of IFS parents felt that their lives were "not at all" or only "a little" meaningful at admission. This stands in contrast to the over 63% of parents who reported feeling that their lives were meaningful either "very much" or an "extreme amount" at follow up.

**Figure 25: To what extent do you feel your life to be meaningful?
IFS Parents Only (N=102)**



Well Being

There were several measures administered to parents at follow up to assess their overall health and well-being. These included:

- How would you rate your quality of life? (Single item)
- Perceived Stress Scale
- WHOQOL—BREF: Physical Subscale
- WHOQOL—BREF: Social Relationships Subscale
- WHOQOL—BREF: Environment Subscale
- How safe do you feel in your daily life? (Single item)
- To what extent do you have the opportunity for leisure activities? (Single item)

(a) HOW WOULD YOU RATE YOUR QUALITY OF LIFE?

As part of the WHOQOL—BREF Scale, parents were asked to rate their overall quality of life both at admission (retrospectively) and at follow up. Answers could range from 1 (very poor) to 5 (very good). Table 53 shows the mean scores for both RT and IFS parents at admission and follow up on this single item. RT parents' rating of overall quality of life at follow up (3.58) was higher than their average rating at admission (2.16). This pattern was similar for IFS parents with an increase in overall quality of life rating from 2.52 at admission to 3.57 at follow up.

Table 53: Overall Quality of Life Scores at Admission and Follow Up

	Admission	Follow Up
RT Parents (N=48)	2.16	3.58
IFS Parents (N=101)	2.52	3.57

Looking for any change in scores over time, a Wilcoxon Signed Ranks test (summarized in Table 54) revealed a statistically significant difference between RT parents' overall quality of life scores from admission to follow up ($p=.000^*$). There was also a statistically significant change in scores from admission to follow up for IFS parents on this single item ($p=.000^*$). There were 37 RT parents and 65 IFS parents who moved to a higher score from admission to follow up indicative of an increase in quality of life over time. Four RT parent and 11 IFS parents reported a decrease in quality of life from admission to follow up. The remaining 7 RT parents and 25 IFS parents had no change in their scores over time.

Table 54: Change in Overall Quality of Life Rating from Admission to Follow Up

	RT	IFS
Increase in Quality of Life	37 (77%)	65 (64.4%)
Decrease in Quality of Life	4 (8.3%)	11 (10.9%)
No Change in Quality of Life	7 (14.7%)	25 (24.7%)
Total	48	101
Wilcoxon Signed Ranks Test	Z= -5.033 p=.000*	Z= -6.057 p=.000*

Figure 26 shows the distribution of responses for RT parents’ assessment of their overall quality of life at both admission and follow up. At admission almost 65% of RT parents reported “very poor” or “poor” quality of life. At follow up however, more RT parents reported an increased quality of life with 50% reporting a “good” quality of life.

**Figure 26: How would you rate your quality of life?
RT Parents Only (N=48)**

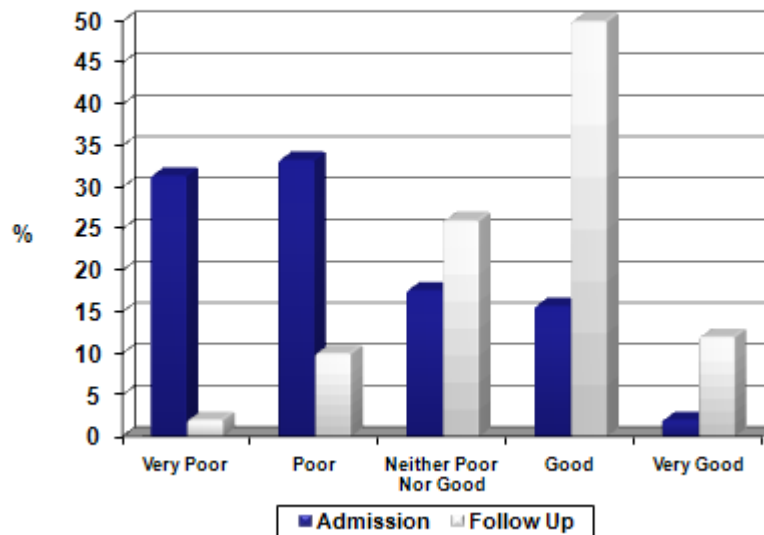
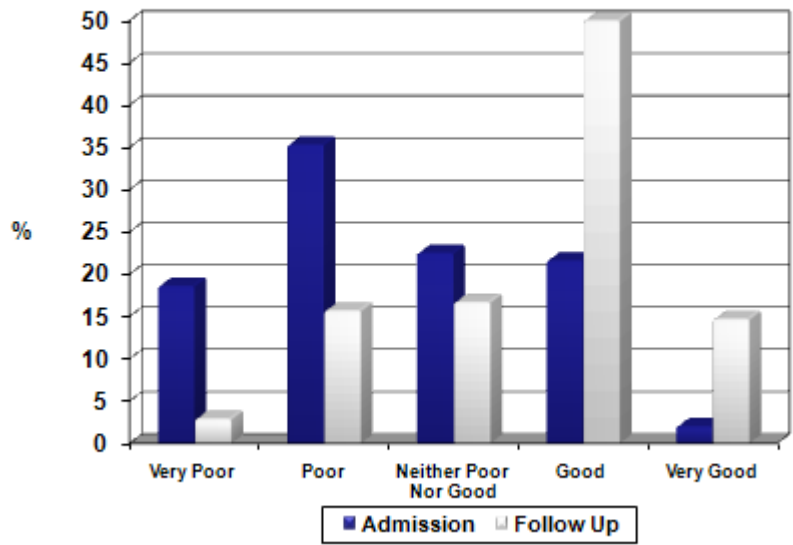


Figure 27 shows the distribution of IFS parents' assessments of their quality of life at both admission and follow up. At admission, approximately 35% of IFS parents reported experiencing a "poor" quality of life. At follow up, the largest proportion of parents (50%) reported "good" quality of life.

**Figure 27: How would you rate your quality of life?
IFS Parents Only (N=102)**



(b) PERCEIVED STRESS SCALE

The Perceived Stress Scale (PSS) is designed to measure the degree to which situations in one's life are appraised as stressful (Cohen & Williamson, 1988). The original instrument has 10 items. A short version of the scale, containing four items, can be used in studies where the instrument is administered at several points in time. We used this 4 item version in our survey. The items included were

- In the last month, how often have you felt that you were unable to control the important things in your life?
- In the last month, how often have you felt confident about your ability to handle your personal problems?
- In the last month, how often have you felt that things were going your way?
- In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

Item responses included 1 (never), 2 (almost never), 3 (sometimes), 4 (fairly often), 5 (very often). A higher score on the overall scale indicated a greater level of perceived stress. Overall scale scores could range from 4 to 20.

Table 55 shows that RT parents had a mean score of 11.02 and IFS parents had a mean score of 11.13 on the 4 item Perceived Stress Scale. There was no significant difference between mean scores for these two groups on this measure ($p=.862$). Both mean scores for RT and IFS parents however were statistically significantly higher than the mean score (9.86) for a comparison sample from the general population (*RT Parents* $t=1.960$, $df=47$, $p=.056^*$; *IFS Parents* $t=3.869$, $df=101$, $p=.000^*$)⁴. The comparison sample consisted of 268 respondents recruited from a post-secondary education institution who were predominantly female with an average age of 29.06.

Table 55: Perceived Stress Scale Scores at Follow Up

Statistics	RT (N=48)	IFS (N=101)
Mean	11.02	11.13
Std. Dev.	4.10	3.25
T-test	$t= -.174$ $df= 76.198$ $p=.862$ (equal variances not assumed)	

⁴ Herrero & Meneses, 2006.

(c) WHOQOL—BREF: PHYSICAL HEALTH SUBSCALE

The WHO Quality of Life—Physical Health Subscale is a 7 item measure of physical quality of life that incorporates assessments of activities of daily living, energy and fatigue, mobility, and work capacity. This subscale is part of the 26 item WHO-Quality of Life Scale (Brief version) that was administered at follow up.

At follow up RT parents had a mean score of 62.35 and IFS parents had a mean score of 61.67 on the physical subscale of the WHOQOL—BREF measure. Table 52 shows that there was no significant difference between scores for each group ($p=.853$). However, mean scores for both RT and IFS parents were statistically significantly lower than the mean score (77.5) for a comparison group⁵ of 33 females aged 40-49 in the general population indicating a somewhat diminished physical health quality of life (*RT Parents* $t=-5.408$, $df=47$, $p=.000^*$; *IFS Parents* $t=-7.473$, $df=101$, $p=.000^*$).

Table 56: WHOQOL-BREF Physical Subscale Scores at Follow Up

Statistics	RT (N=48)	IFS (N=101)
Mean	62.35	61.67
Std. Dev.	19.4	21.67
T-test	t=.186 df= 147 p=.853 (equal variances assumed)	

(d) WHOQOL—BREF: SOCIAL RELATIONSHIPS SUBSCALE

The WHOQOL—BREF Social Relationships Subscale is a 3 item measure of quality of social relationships that incorporates assessments of personal relationships, social support and sexual relationships. This subscale is part of the 26 item WHO-Quality of Life Scale (Brief version) that was administered at follow up.

⁵ Hawthorne et al., 2006.

Table 57 shows the mean scores at follow up for RT parents (61.89) and IFS parents (61.55) on the WHOQOL—BREF social relationships subscale. While there was no significant difference between mean scores for each group ($p=.925$), both RT and IFS parents had a mean score that was statistically significantly lower than the comparison sample⁶ mean score of 76.8 on this subscale (*RT Parents* $t=-4.943$, $df=47$, $p=.000^*$; *IFS Parents* $t=-7.406$, $df=101$, $p=.000^*$).

Table 57: WHOQOL-BREF Social Relationships Subscale Scores at Follow Up

Statistics	RT (N=48)	IFS (N=101)
Mean	61.89	61.55
Std. Dev.	20.89	20.67
T-test	$t=.094$ $df= 147$ $p=.925$ (equal variances assumed)	

(e) WHOQOL—BREF: ENVIRONMENTAL HEALTH SUBSCALE

The WHOQOL—BREF Environmental Health Subscale is an 8 item measure of environmental health that incorporates evaluations of financial resources, physical safety and security, home environments, and opportunities for leisure activities. This subscale is part of the 26 item WHO-Quality of Life Scale (Brief version) that was administered at follow up.

At follow up RT parents had a mean score of 64.84 and IFS parents had a mean score of 61.69 on the environmental subscale of the WHOQOL—BREF measure. Table 58 shows that there was no significant difference between the scores for each group ($p=.271$). However, mean scores for both RT and IFS parents were statistically significantly lower than the mean score (72.7) on this subscale for the comparison group⁷ of 33 females aged 40-49 in the general population (*RT Parents* $t=-3.701$, $df=47$, $p=.000^*$; *IFS Parents* $t=-6.641$, $df=101$, $p=.000^*$).

Table 58: WHOQOL-BREF Environmental Health Subscale Scores at Follow Up

Statistics	RT (N=48)	IFS (N=101)
Mean	64.84	61.69
Std. Dev.	14.70	16.95
T-test	$t=1.104$ $df= 147$ $p=.271$ (equal variances assumed)	

⁶ Hawthorne et al., 2006.

⁷ Hawthorne et al., 2006.

(f) HOW SAFE DO YOU FEEL IN YOUR DAILY LIFE?

Our earlier research on the daily living realities of families caring for children with emotional and behavioural challenges suggested that parents often felt unsafe in their homes prior to treatment as their children’s extreme behaviours were perceived as threatening to the safety of parents and siblings within the home (e.g. threatening physical harm with household objects, destroying property within the home). As such, we looked more closely at the item within the environmental health subscale of the WHOQOL—BREF that measured how safe parents felt in their daily lives. Parents responded to this item at both admission (reflecting back to the few weeks prior to their involvement with services) and follow up.

Figure 28 shows the distribution of responses for RT parents at both admission and follow up on this item. At admission the largest percentage of RT parents (32%) reported feeling only “a little” safe in their everyday lives. At follow up, 56% of RT parents reported feeling “very much” safe in their everyday lives.

Figure 28: How safe do you feel in your everyday life? RT Parents Only (N=48)

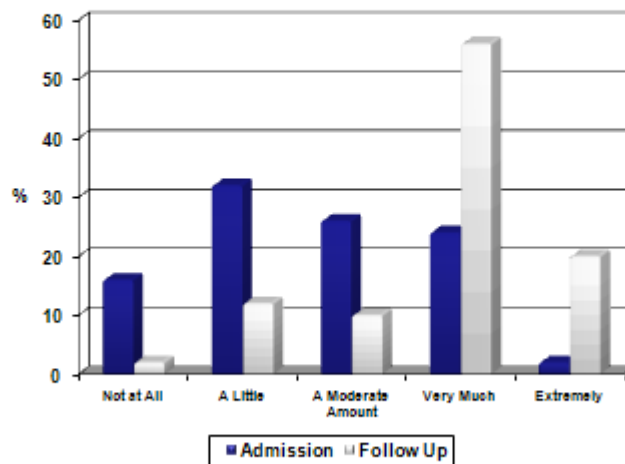
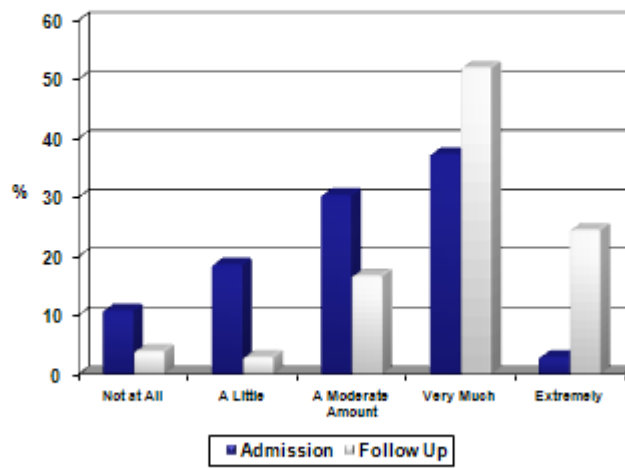


Figure 29 shows the distribution of responses for IFS parents at both admission and follow up on this item. At admission over one-third of IFS parents reported feeling “a moderate amount” of safety in their daily lives. At follow up, a greater proportion of parents experienced an increased level of safety in their everyday lives with over 50% of IFS parents reported to feel “very much” safe in their everyday lives.

Figure 29: How safe do you feel in your everyday life? IFS Parents Only (N=102)



(g) TO WHAT EXTENT DO YOU HAVE THE OPPORTUNITY FOR LEISURE ACTIVITIES?

Our previous qualitative study on the daily living realities of families caring for children with emotional and behavioural challenges indicated that parents had very little time to devote to their own activities, particularly any leisure oriented activities. To further explore this finding, we used an item from the WHOQOL—BREF Environmental Health subscale which assessed parents’ opportunities for participating in leisure activities. Parents were asked about their opportunities for leisure activities both in the few weeks leading up to involvement in services and at follow up.

Figure 30 shows the distribution of RT parents' assessments of the extent to which they had the opportunity for leisure activities. At admission, 80% of all RT parents reported either no opportunity or only little opportunity for leisure activities. At follow up, 50% of RT parents still reported little to no opportunity for leisure activities.

**Figure 30: To what extent do you have the opportunity for leisure activities?
RT Parents Only (N=48)**

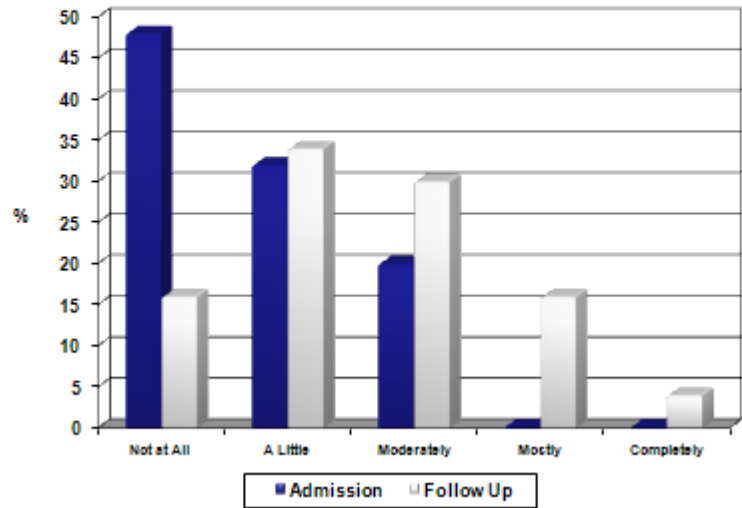
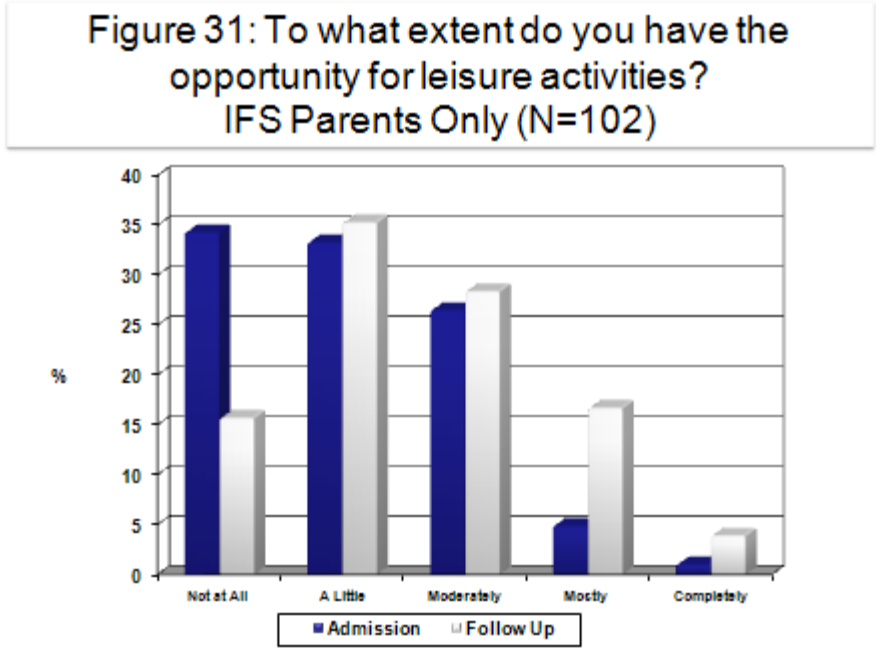


Figure 31 shows the distribution of responses for IFS parents at both admission and follow up for the extent to which they have opportunity for leisure activities. At admission the largest single proportion of parents (32.7%) reported having moderate opportunity for leisure activities; however in combination almost 60% of IFS parents had little to no opportunity for leisure activities. At follow up a great proportion of IFS parents still had limited opportunity for leisure activities.



Overall Comments on Health and Well Being for Youth and Parents

The patterns of change over time (from admission to follow up) in youth mental health suggest improved functioning in a number of areas, particularly youth's management of internalizing behaviours such as depression. Improvements in externalizing behaviours such as regulating attention, impulsivity, and activity were also evident. However, follow up functioning in these areas was still at clinically significant levels of difficulty. Overall patterns included:

- Both RT and IFS youth showed a statistically significant change in scores from admission to follow up on two measures of depression: the CAFAS Moods subscale and the BCFPI Managing Moods subscale. Improvements on the BCFPI Managing Moods subscale at follow up situated youth scores below the clinical area of concern.
- Both groups of youth evidenced greater functioning on the BCFPI Regulating Attention subscale at follow up than at admission. However, follow up scores on this measure were still clustered around the clinical impairment threshold.
- Admission scores on the BCFPI Regulating Impulsivity and Activity subscale were slightly below the clinical cut off for concern for both RT and IFS youth. At follow up, RT youth appeared to have lower scores (indicative of improved regulation of impulsivity and activity) than IFS youth on this subscale. This difference, however, was not statistically significant. Both RT and IFS youth showed a significant reduction in symptoms from admission to follow up.
- At admission, both RT and IFS youth scored within the range of clinical concern on the BCFPI Externalizing Behaviours Composite scale. At follow up, both groups saw a significant improvement in scores, with RT youth showing a slightly greater amount of improvement. However, follow up scores for both groups of youth were still within the area of clinical concern.
- The change in scores on the BCFPI Total Problems Composite scale from admission to follow up was statistically significant for both RT and IFS youth. Despite improved functioning at follow up, both RT and IFS youth had average total problems scores within the clinical range at admission and follow up.
- Emotional health concerns that youth identified in their interviews included depression, anxiety, difficulties managing anger, and substance use. Youth described improved management of these mental health concerns at follow up, some with the use of medication.

Levels of quality of life in the areas of youth physical health, emotional health, and self esteem varied. From the youth interviews, most described being happy with their state of physical health. Those who were less satisfied identified concerns with weight, eating and sleeping habits, smoking, and illness. Results from the KINDL measures of quality of life included:

- There was a statistically significant change in scores from admission to follow up on the emotional subscale measure of quality of life for both RT and IFS youth. Both RT and IFS youth were reported to have improved quality of life at follow up. IFS youth had slightly higher scores than RT youth at both admission and follow up.
- While both RT and IFS youth showed a significant improvement in their level of self esteem from admission to follow up, IFS youth had a consistently higher level of self esteem at both times.
- Both groups showed a statistically significant improvement in physical health quality of life from admission to follow up. RT youth, however, were reported to have higher levels of physical health than IFS youth at both admission and follow up.

Overall, parent mental health and well being trends were varied. Parents reported sleep disturbances and feelings of sadness at follow up while also reporting improvements in their quality of life from admission to follow up. Noteworthy findings include:

- The majority of RT and IFS parents reported frequent sleep disturbances. In addition, two-thirds of RT and IFS parents reported feelings of sadness that occurred more than one day a week.
- At admission, there were very few parents who reported enjoying life more than a “moderate amount”. At follow up, more than half of IFS parents reported enjoying life “very much” or an “extreme amount”.
- There was a statistically significant change in quality of life ratings from admission to follow up for both RT and IFS parents. About three-quarters of RT parents and two-thirds of IFS parents reported an increase in overall quality of life from admission to follow up.

References

- CAFAS in Ontario. (2007). *Ontario's Children with Mental Health Needs 2006 Report*. Toronto: The Hospital for Sick Children.
- Cameron, G., de Boer, C., Frensch, K., & Adams, G. (2003). Siege and response: Families' everyday lives and experiences with children's residential mental health services. Waterloo, ON: Wilfrid Laurier University, Partnerships for Children and Families Project.
- Cohen, S. & Williamson, G. M. (1988). Perceived stress in a probability sample of the United States. In S. Spacapan & S. Oskamp (Eds.), *The social psychology of health*. (pp. 31-67). Newbury Park, CA: Sage.
- Cunningham, C. E., Pettingill, P., & Boyle, M. (2002). *The Brief Child and Family Phone Interview (BCFPI-3). Interviewers Manual*. Canadian Centre for the Study of Children at Risk.
- Hawthorne, G., Herrman, H., & Murphy, B. (2006). Interpreting the WHOQOL-BREF: Preliminary population norms and effect sizes. *Social Indicators Research*, 77, 37-59.
- Herrero, J., & Meneses, J. (2006). Short web-based versions of the perceived stress (PSS) and Center for Epidemiological Studies-Depression (CESD) Scales: A comparison to pencil and paper responses among internet users. *Computers in Human Behavior*, 22, 830-846.
- Hodges, K. (2000). *Child and Adolescent Functioning Assessment Scales (2nd rev.)*. Ypsilanti: Eastern Michigan University.
- Hodges, K., Doucette-Gates, A., & Kim, C. (2000). Predicting service utilization with the Child and Adolescent Functional Assessment Scale in a sample of youths with serious emotional disturbance served by center for mental health services-funded demonstrations. *Journal of Behavioral Health Services Research*, 27(1), 47-59.
- Hodges, K. & Kim, C. (2000). Psychometric study of the CAFAS: Prediction of contact with the law and poor school attendance. *Journal of Abnormal Child Psychology*, 28(3), 287-297.
- Hodges, K., & Wong, M. M. (1996). Psychometric characteristics of a multidimensional measure to assess impairment: The Child and Adolescent Functional Assessment Scale. *Journal of Child and Family Studies*, 5(4), 445-467.
- Ravens-Sieberer, U. & Bullinger, M. (2000). Kindl-R English questionnaire for measuring health-related quality of life in children and adolescents. Revised Version Manual. Retrieved Oct 27, 2005, from <http://www.kindl.org>

St. Pierre, J. (Feb, 2007). *BCFPI/CAFAS outcomes at CPRI/MCYS*. Ontario Psychological Association Annual Conference, Toronto.