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Executive Summary

This report describes and evaluates a system for monitoring the effectiveness of early childhood and family centre services provided by the Daughters of Charity Child and Family Service (DoCCFS) in counties Dublin, Meath and Wicklow over a two-year period from 2015 to 2017. It represents a shared strategic approach by managers, administrative staff and case workers at the DoCCFS, and researchers based at Trinity Research in Childhood Centre (TRiCC) at Trinity College Dublin to defining the aims of the project, the measures employed, and the training necessary to instil in key project staff a shared sense of ownership of the enterprise.

The focus of this report is on the objective measures used to capture and quantify the progress of children and families engaging with services. To this end survey questionnaires were developed to elicit information on a range of child, parent, family and household characteristics along with outcome measures that aimed to evaluate child and parent adjustment, child-parent relationships, children's coping, and school readiness. The surveys were administered by early childhood workers to Early Childhood Development Service (ECDS) parents over the academic years 2015-2016 and 2016-2017, and to all new Family Centre service users by their family key worker from December 1st 2015 to December 31st 2017. Data is available from two time points: Time 1 (pre-intervention) and Time 2 (post-intervention).

Key Findings

Early Childhood Development Service (ECDS)

Children attending ECDS centres are typically aged between 36 and 47 months. The majority are Irish and come from two-parent homes, although a higher proportion of non-Irish and lone-parent families are noted in this sample when compared with a nationally representative one. The children are predominantly in good health with only a small percentage (8.2%) reported by parents as having any ongoing chronic physical or mental health problem, illness or disability. Half of all children were reported by parents as having experienced at least one stressful life event in their young lives, most typically this is specified as 'moving house'.

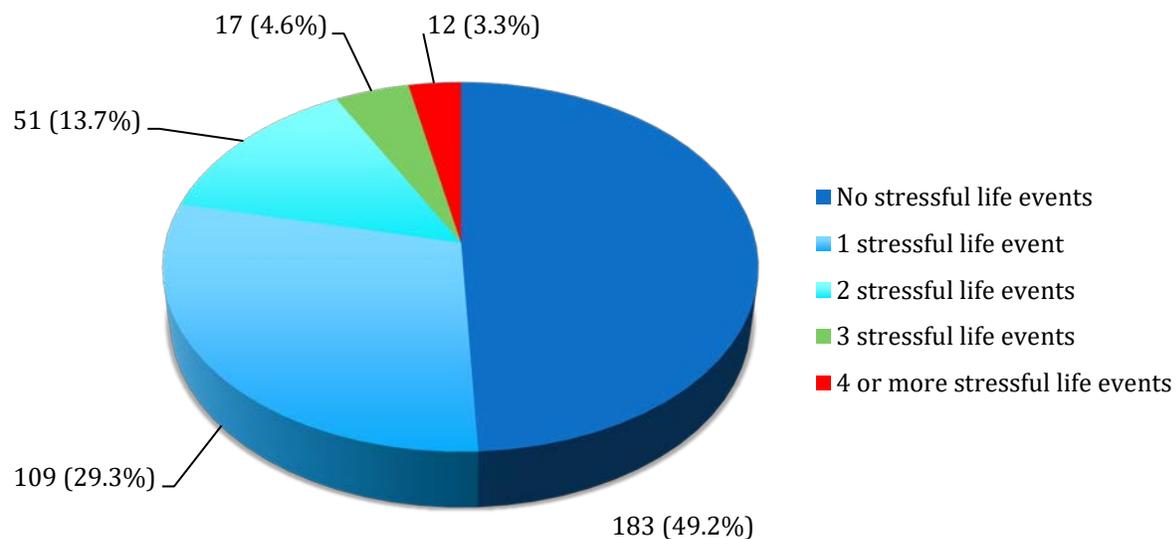


Figure A: Number of stressful life events experienced by the children in ECDS Centres (N=372)

Average scores on the measures of social, emotional and behavioural adjustment for the whole sample of children were in, or close to, the normal range at both Time 1 and Time 2 data collection points. Improvements on all measures were noted, though only prosocial skills improved to an extent that was statistically significant. When the children were considered separately by sex, boys showed significant improvements with regard to levels of emotionality and hyperactivity specifically, and their combined score on total difficulties (which also considers conduct problems and peer relationship issues).

Table A: Changes in the average scores of social, emotional and behavioural adjustment subscales from Time 1 to Time 2 for the sample as a whole and for boys and girls separately¹.

	All Children		Boys		Girls	
	Time 1	Time 2	Time 1	Time 2	Time 1	Time 2
<i>Emotionality</i>	1.8	1.7	1.9	1.6*	1.6	1.9
<i>Conduct Problems</i>	2.5	2.3	2.6	2.3	2.4	2.3
<i>Hyperactivity</i>	3.6	3.3	3.9	3.5*	3.2	2.9
<i>Peer Problems</i>	1.8	1.7	1.6	1.7	2.1	1.7
<i>Prosocial Behaviour</i>	7.9	8.2*	7.7	8.1*	8.1	8.3
<i>Total Difficulties</i>	9.6	9.0	9.9	9.1*	9.2	8.8

* Statistically significant improvement from Time 1 to Time 2 ($p < .05$)

In the national longitudinal study of children in Ireland, Growing Up in Ireland, 12.5% of five year olds could be categorized as having high or very high levels of emotional and behavioural problems. A similar proportion (14%) was noted in the ECDS sample. Among this group, improvements noted from Time 1 to Time 2 with regard to conduct, hyperactivity, prosocial skills and overall difficulties were significant and considerable. These results suggest that while children generally benefit from the early childhood intervention, young boys and children with problematic levels of functioning may find

¹ The overall scores of *Emotionality*, *Conduct Problems*, *Hyperactivity* and *Peer Problems* subscales can range from 0-10 with higher scores indicating more difficulties, whereas higher scores on the *Prosocial Behavior* subscale indicate better adjustment. *Total Difficulties* scores are the sum total of the four ‘problem’ subscales and can range from 0 – 40 with higher scores indicating more difficulties. Highlighted Time 2 scores indicate statistically significant improvements from Time 1 to Time 2.

services particularly beneficial.

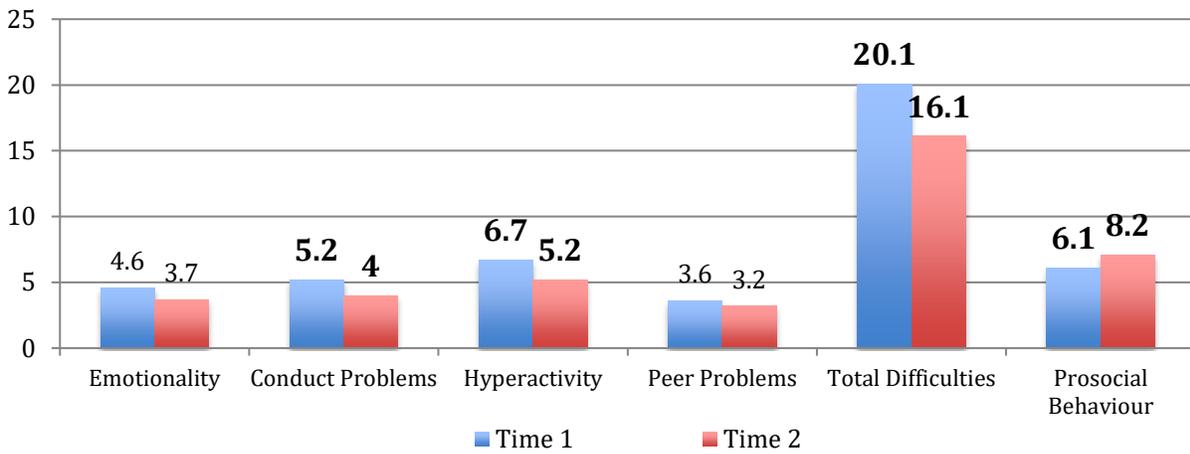


Figure B: Changes in the average scores of social, emotional and behavioural adjustment subscales from Time 1 to Time 2 for the sample of children with high levels of emotional and behavioural problems (N=31)

The measure of mental health among parents indicated that there is a positive trend in improving parents' functioning in this respect from Time 1 to Time 2, but this change was not statistically significant. However, the average score of the group was high, even at Time 1, and comparable with average scores for adults from nationally representative samples. Among parents with very low scores indicative of mental disorder at Time 1, reports of improvements at Time 2 were highly significant. Though their Time 2 scores were still lower than the group average, this finding suggests that these individuals particularly benefitted following engagement with early childhood services and may continue to improve with more targeted intervention. Similar could be said for non-Irish parents who report significantly poorer mental health than their Irish counterparts. However, the examination of effect sizes suggests that this gap is closing at Time 2, where

significant positive trends in reports of mental wellbeing were seen.

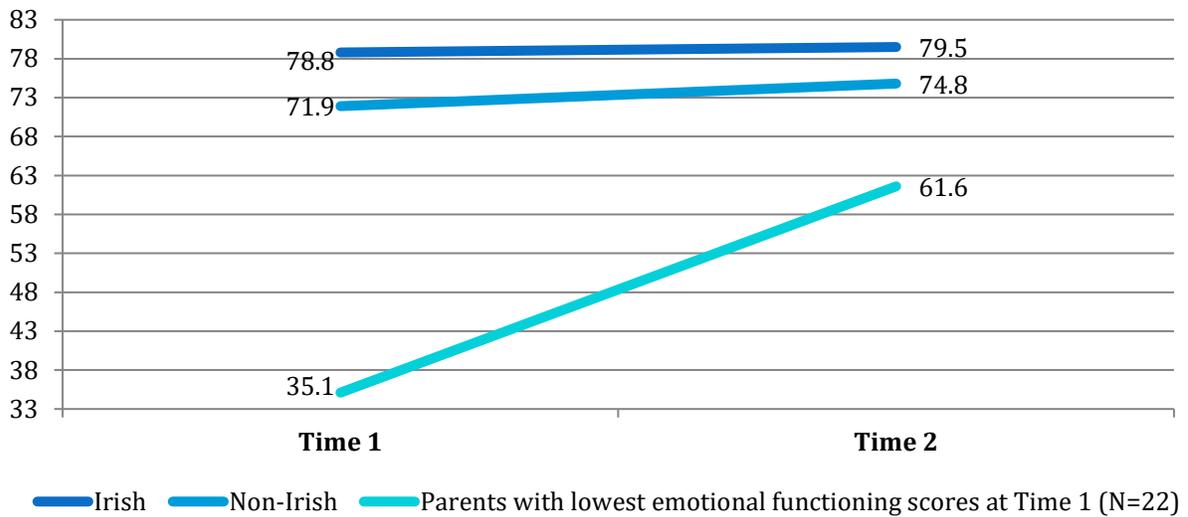


Figure C: Changes in the average scores of emotional functioning scale from Time 1 to Time 2 among Irish and non-Irish parents (guardians) and those with lowest emotional functioning scores at Time 1

Parents’ reports of closeness and conflict in their encounters with their children imply that parents and children generally enjoy very high levels of closeness and relatively low levels of conflict with each other. Thus, while positive trends were noted from Time 1 to Time 2, it is not surprising that these improvements were not statistically significant considering that the relationships between parents and children attending ECDS centres are typically warm and nurturing to begin with.

Finally, the ECDS children improved significantly over the school year with regard to their school readiness. This was gauged by ECDS staff as they rated children’s development with regard to social-emotional adjustment, language and facilitating

learning approaches. Comparing average scores of School Readiness for boys and girls separately showed that at both Time 1 and Time 2, girls were significantly more 'school ready' than boys, but statistically significant improvements were made for both groups over the course of the preschool year. Similarly, at Time 1 average school readiness scores for Irish children were significantly higher than those of non-Irish children, but both groups showed significant improvements between Time 1 and Time 2 so that the difference between the groups were not significant at Time 2.

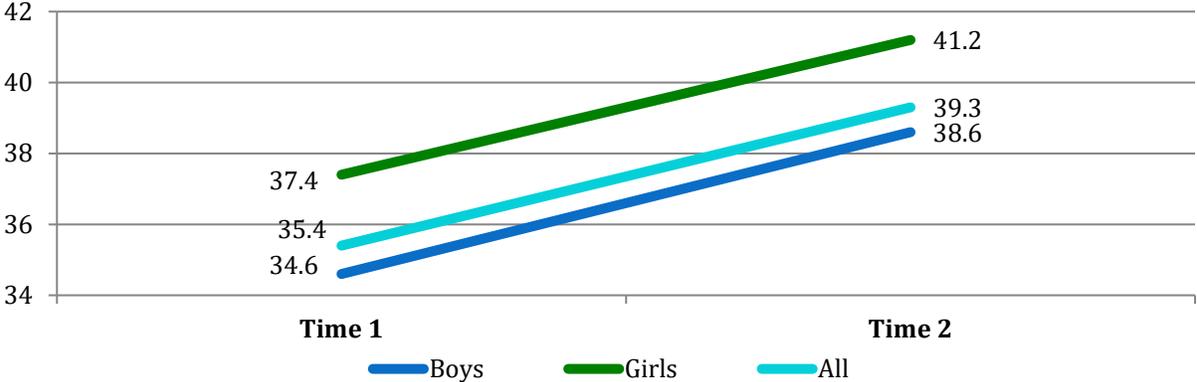


Figure D: Changes in the average scores of School Readiness scale from Time 1 to Time 2 for the overall sample and by child’s gender

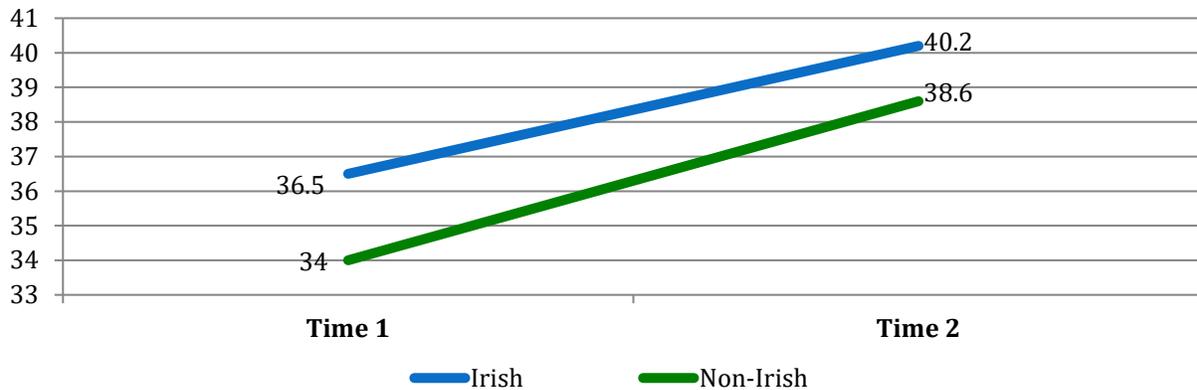


Figure E: Changes in the average scores of School Readiness scale from Time 1 to Time 2 by child's nationality

Family Centres

Children involved in Family Centre interventions ranged from infants to adolescents but the majority (64%) were aged 5 to 12 years. Over ninety five percent of the children were Irish. The majority of adult respondents to the survey were also Irish, female and between the age of 30 to 49 years. Almost half had some form of third level, or higher education

Looking at some other characteristics of children and parents attending Family Centres services gives rise to some causes for concern. For example, when compared with children reported in Growing Up in Ireland, three times as many Family Centre children come from single-parent homes, twice as many present with physical or mental health problems, and five times as many children have experienced four or more stressful life events in their young lives.

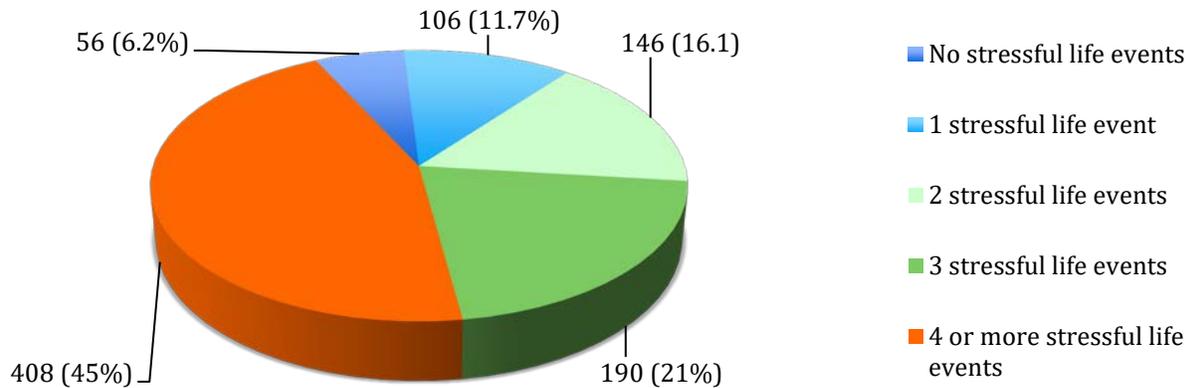


Figure F: Number of stressful life events experiences by the children in the Family Centres (N=906)

Perhaps unsurprisingly, Family Centre children are on average experiencing greater problems with all aspects of social, emotional and behavioural functioning and twice as many can be classified as having ‘abnormal’ or ‘high’ to ‘very high’ levels of global difficulties. However, following intervention, average scores on total difficulties and each of the subscales that comprise this measure are more comparable with the nationally representative sample, even among children experiencing high levels of global difficulties at Time 1.

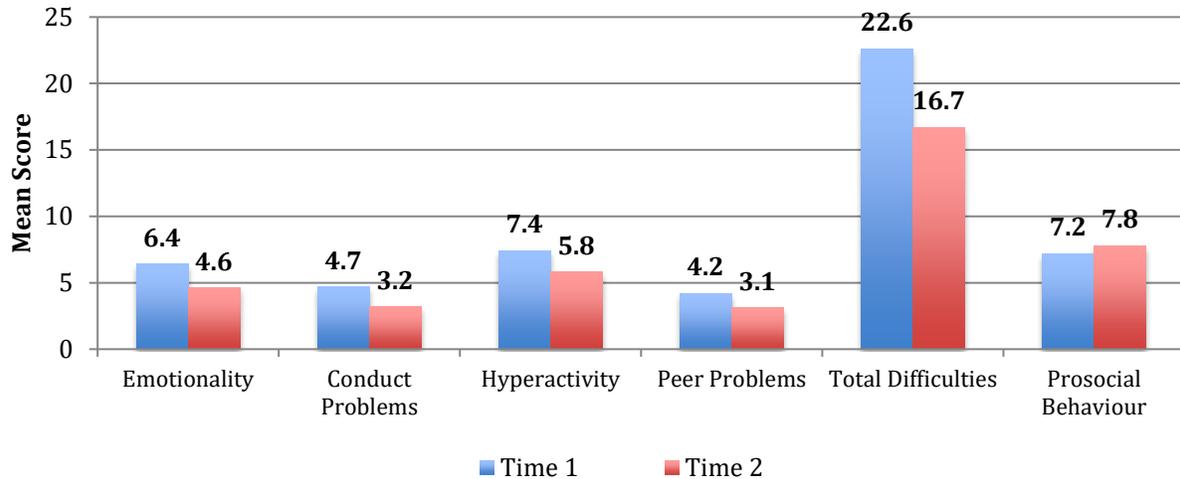


Figure G: Changes in the average scores of social, emotional and behavioural adjustment subscales from Time 1 to Time 2 for the sample of children with high or very high emotional and behavioural problems (parent-report)

The Time 1 average score for parents' mental health in the group was lower than a nationally representative sample but improved significantly over the course of Family Centre intervention. However, one third of the overall sample of parents reported levels of distress indicative of depressive disorders. This is three times the proportion that attends ECDS centres. Highly significant improvements were noted for this subgroup from Time 1 to Time 2, which is encouraging, though the average score is still low and leaves scope for further improvements to be gained.

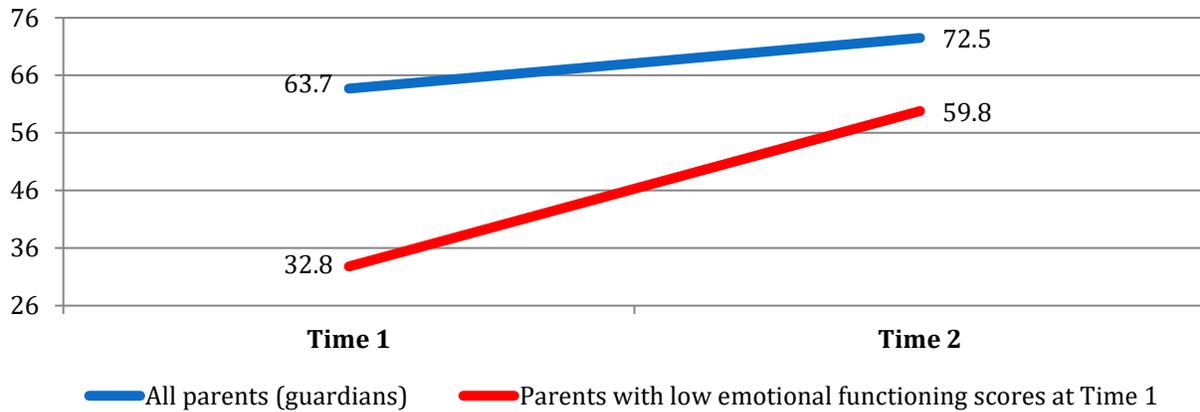


Figure H: Changes in the average scores of emotional functioning scale from Time 1 to Time 2 among all parents (guardians) and also those with lowest emotional functioning scores at Time 1

Positive changes were noted with regard to child-parent interactions from both the perspectives of children and their parents. Specifically, children reported significantly more warmth and responsiveness from their parents following the Family Centre intervention and parents reported greater closeness and less conflict with their children.

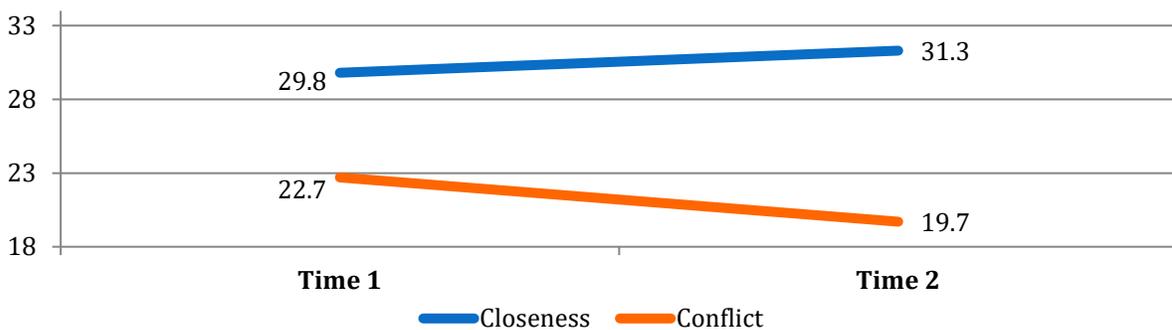


Figure I: Changes in the average scores for Closeness and Conflict from Time 1 to Time

2

Finally, while improvements noted in younger children's coping abilities were not to the extent of reaching statistical significance, the adolescent group saw significant reductions in their reported distress caused by problems they had encountered and their use of maladaptive coping responses.

Conclusions

The findings from this report demonstrate that children and parents in receipt of DoCCFS services show benefits across a range of domains encompassing child socio-emotional and behavioural functioning, parent mental health, child-parent relationship quality, school readiness, and children's coping responses. The effect sizes between pre- and post-intervention scores for significant findings have ranged from modest to substantial. In some cases, where children and their parents first presented with the most concerning scores on measures of psychological and behavioural functioning, their improved scores by Time 2 differed from those at Time 1 by one standard deviation. This is extremely encouraging and should prompt reflection on how services can be developed and implemented to meet the particular needs of these groups who can be identified at the earliest contact. Similarly, differential pathways within services might be beneficial for migrant communities who have been found here to show vulnerabilities among their children and parents when compared with Irish counterparts.

Moving forward from here, it is recommended that the process of monitoring outcomes should be continued. Measures may need to be continually reviewed and refined to meet

evaluation needs. Particular care should also be taken to account for incomplete surveys and resulting quantities of missing data that limit our ability to fully and accurately describe the demographic profiles of service users and assess how certain characteristics may impact upon service engagement and success. Consideration might also be given to assessing services using process evaluation in addition to effect evaluation, and also in a more randomized, controlled way. For now, the next step in the process is to incorporate the measure of Adverse Childhood Experiences so as to explore links between exposure to early life stress and later negative outcomes among service users. It is anticipated that a greater understanding in this respect will assist the DoCCFS in progressing a key aim of making services ever more effective in meeting users' needs.

Chapter One: Introduction

Background Context

The present study has its genesis in the movement endorsing the central place of evidence in directing the work of organisational forms of service delivery and professional practices, which originated in medical science in the 1980s. Since then a cultural shift has become apparent in organisations delivering human services, whereby outcomes for the users of services have achieved primacy of importance over service activity data. A number of influences can be identified as promoting this shift in emphasis from measuring *what is done* to *the effect of what is done*. Among these is a fundamental change in public attitudes towards the role of professionals employed in public or voluntary sectors, whereby positive regard for their work is based less on status and more on outcome. This is closely associated with a rights based approach to relationships in the public sphere, whereby professionals are increasingly required to validate the efficacy of any intervention made or advice given, with recourse to evidence being vital in this respect. At organisational level, commissioners of services have increasingly eschewed service activity data in favour of user outcome data, building these into contracts with service providers – who in turn have replicated this change in their work practices, introducing bespoke measures to better capture outcomes for service users.

The value placed on evidence-based practice has now driven successive waves of partnership work with service users and university researchers in order to identify fitting

measures of service impact so as to better inform service effectiveness. Such a process is to be commended as it both seeks to inform service effectiveness in the present and is also future orientated in opening up new understandings of the needs of service users and what might work for them, consequently providing stimuli for the development of new and bespoke services.

Such developments, of course, do not take place in a policy vacuum. The Irish Government's policy framework for children and young people 'Better Outcomes, Brighter Futures' (BOBF; Department of Children and Youth Affairs, 2014) seeks to create a shared set of outcomes to which all government departments, agencies, statutory services and voluntary and community sectors may subscribe. Three of the five outcomes are congruent with the central aims of DoCCFS. These are:

- Active and healthy, with positive physical and mental wellbeing;
- Achieving full potential in all areas of learning and development;
- Safe and protected from harm.

In making these outcomes real, Better Outcomes, Brighter Futures "prioritizes the key cross-cutting transformational goals which require concerted and coordinated action to ensure the realization of the respective outcomes", four of which are particularly pertinent to the services provided by Daughters of Charity Child and Family Service (DoCCFS), namely:

- Supporting parents,

- Earlier intervention and prevention,
- Listening to and involving children and young people,
- Ensuring quality services.

In many ways alignment with the BOBF goals is very straightforward as the purpose of the Family Centres are to involve children and parents in early intervention strategies designed to provide effective supports. The means by which the quality of such services are measured is achieved in two ways, one with respect to process and how well families are engaged by staff in the assessment, service delivery and evaluative sequence, and the more objective measures used in such processes such as standardised instruments to provide indication of progress in meeting goals. This duality in approach speaks to the three outcome measures of good health, developmental achievement, and protection from harm.

Objectives of the Present Report

The present document is the latest in a series of reports that describes and evaluates a system for monitoring the effectiveness of early childhood and family centre services provided by the DoCCFS in counties Dublin, Meath and Wicklow over a two-year period from 2015 to 2017. The DoCCFS initially engaged the services of researchers from the School of Psychology, University College Dublin, who recommended that *'a service policy should be implemented in which staff are required to collect outcome monitoring data'* and that *'the assessment protocol should be simplified and streamlined to reduce the burden on clients and*

staff (Carr & Hamilton, 2013, pg 14). Researchers from Trinity Research in Childhood Centre (TRiCC) at Trinity College Dublin were then commissioned to take forward these recommendations by further developing the suite of standardised evaluation tools, train staff in their administration, monitor implementation, and provide interim feedback. This was done with two main aims in mind. The first of these was the development of a robust **Outcome Framework** via the implementation of an organisational culture sensitive to outcomes that provided measures of effectiveness as benchmarked against the Better Outcomes, Brighter Futures policy goals. The second being to **Implement Appropriate Monitoring Tools**, which involved reviewing the existing tools and further refining these in ways which might capture the complexity of the work carried out across the services.

It is also important to recognise that the data presented in this report is the product of a shared strategic approach that has two distinctive features. The first being a shared vision between DoCCFS Board of Directors, managers, administrative staff, project professionals and the Trinity personnel, involving agreement as to aims of the project, the measures employed and the training necessary to inculcate and maintain a shared sense of ownership of the enterprise. The second being the implementation and review of the measures, involving continued feedback, refinement and evaluation, with each iteration building on the previous in seeking to improve on the measures employed, to achieve the best fit possible in terms of capturing the progress of children and families engaging with DoCCFS services. Whilst in this report we concentrate on those more objective measurements, we would also seek to acknowledge the learning process within

which their application and meanings are situated. This is not the final word on the best measures to use to best capture the impact of services on their users, but we believe that it is a significant step forward in the process of getting there.

Evaluation Measures

Two versions of a survey questionnaire were developed; one for use in the **Early Childhood Development Service (ECDS)** and one for the **Family Centre Service**. The questionnaires elicited information on a range of child, parent, family and household characteristics along with outcome measures that aimed to evaluate child and parent adjustment, child-parent relationships, children's coping, and school readiness. The specifics of these measures are detailed below and Table 1 outlines which measures were adopted in each service.

- Child adjustment was measured using the **Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997)**. The 25 items tap into prosocial behaviour (e.g. 'Child is considerate of other people's feelings'), emotional symptoms (e.g. 'Child has many fears, is easily scared'), hyperactivity and inattention (e.g. 'Child is constantly fidgeting or squirming'), conduct problems (e.g. 'Child often fights with other children or bullies them') and peer relationship problems (e.g. 'Child is rather solitary, tends to play alone'). For each item response options are 'not true', 'somewhat true', and 'certainly true.' Scores on the SDQ subscales can range from 0-10 with higher scores on all but the *Prosocial Behavior* subscale indicating more

difficulties. Scores on the four difficulties subscales can be summed to create a *Total Difficulties* score ranging from 0 to 40 and, again, higher scores indicate more difficulties.

- Parental adjustment was assessed using the **Mental Health Inventory-5** (MHI-5; Berwick et al., 1991). This five-item measure is used widely to evaluate overall emotional functioning among parents. It refers to the past month and asks parents how much of the time they would estimate that they were “calm or peaceful” or “nervous”, for example. For each item response is on a six-point scale ranging from ‘none of the time’ to ‘all of the time’. Scores can range from 0 to 100 with higher scores reflecting greater wellbeing.
- Child-parent relationships were assessed by way of the **Parenting Style Inventory-II** (PSI-II; Darling & Toyokowa, 1997) and the **Pianta Child-Relationship Scale** (CPRS; Pianta, 1992). The ten-item PSI-II was completed by children attending Family Centres who were aged nine years and above with respect to both of their parents, where applicable. The scale taps into children’s views of their parent as ‘responsive’ (e.g. ‘My mother/father spends time just talking to me’) or ‘controlling’ (e.g. ‘My mother really expects me to follow family rules’). Children rate the statements posed to them on a five point scale from ‘strongly agree’ to ‘strongly disagree’. Scores on the Responsiveness and Control subscales can range from 5 to 25 with higher scores indicating more responsiveness and control, respectively. To get parents’ views on their

relationship with their children, the 15-item CPRS was administered. This scale taps into both 'closeness' (e.g. *'I share an affectionate, warm relationship with my child'*) and 'conflict' (*'My child and I always seem to be struggling with each other'*) experienced with sons and daughters. Statements are rated on a five-point scale from 'definitely does not apply' to 'definitely applies'. Scores for the Closeness subscale can range from 7 (low levels of closeness) to 35 (high levels of closeness) while on the Conflict subscale scores can range from 8 (low levels of conflict) to 40 (high levels of conflict).

- Children's coping abilities were measured by way of the **Kidcope** (Spirito et al., 1988). There are two versions of the Kidcope scale: one for younger children aged 7-12 years and one for adolescents aged 13-18 years. Both are widely used in testing for the frequency and effectiveness of ten cognitive and behavioral coping strategies, namely distraction, social withdrawal, wishful thinking, resignation, self-criticism, blaming others, problem-solving, emotional regulation, cognitive restructuring and social support. Based on these coping strategies, three major coping patterns are generated:
 - *Active Coping Strategies* (e.g. problem solving, emotional regulation, cognitive restructuring and social support);
 - *Negative Coping Strategies* (e.g. self-criticism and blaming others);
 - *Avoidant Coping Strategies* (e.g. distraction, social withdrawal, wishful thinking, and resignation).

Each version of the Kidcope screening tool is divided into two parts. In the first part, children describe a problem situation that they generate themselves before answering three questions about how upsetting they found it (*Problem Distress*) from “not at all” (0) to “very much” (4). The scores for the three questions are summed with the higher score indicating that a child is highly emotionally reactive. In the second part, children rate a series of coping strategies, indicating if they use them (*Use Frequency*) and how much each helps (*Efficacy*). Scores for Active Coping range from 0 to 6, for Negative Coping from 0 to 2 and for Avoidant Coping from 0 to 7 with higher scores in all cases indicating more frequent use of the respective strategy.

- Finally, school readiness was measured using the **Santa Barbara School Readiness Scale** (SBSRS; Pyle, undated). This 15-item scale is completed by early childhood workers and taps into social-emotional adjustment (e.g. ‘Child plays and works cooperatively and appropriately’), language development (e.g. ‘Child orally retells a familiar story’), and approaches toward learning (e.g. ‘Child is able to use objects such as pencils, scissors or paint brushes’). For each statement responses can be rated as ‘never’, ‘sometimes’, or ‘often’ and higher scores in each of the three domains of development indicate greater school readiness. In addition, an overall score on school readiness is calculated by summing scores on the three subscales. Scores here range from 15 to 45 with higher scores indicating better adjustment to school.

Table 1: Scales adopted to measure outcomes for Early Childhood Development Services and Family Centres

Outcome	Scale	Administered to:	Service
Child Adjustment	Strengths & Difficulties Questionnaire	Children aged 9 years and over Parents (guardians)	Family Centre Service & Early Childhood Development Service
	Santa Barbara School Readiness Scale	ECDS workers	Early Childhood Development Service
	Kidcope	Children aged 9 years and over	Family Centre Service
Parent Adjustment	Mental Health Inventory-5	Parents	Family Centre Service & Early Childhood Development Service
Parent-Child Relationship	Parenting Style Inventory-II	Parents (guardians)	Family Centre Service & Early Childhood Development Service
	Pianta Child-Parent Relationship Scale	Children aged 9 years and over	Family Centre Service

It was appreciated that families with many and diverse compositions attend services. The survey questionnaire was not designed to capture the experiences of all family members, but was focused on the parent or carer who is attending the service alone or together with his/her child/ren. If this parent or carer had more than one child, interviewers asked him or her to answer the child-related questions with the child who he or she identified as being of principal concern to them. If the child was also engaging with services and he

or she was aged over nine years he or she was invited to complete some measures of adjustment, child-parent relationship and coping. In the Early Childhood Development Service an ECDS Worker completed the assessment of children's school readiness.

Evaluation Implementation

The surveys were administered by early childhood workers to ECDS parents over the academic years 2015-2016 and 2016-2017 and to all new Family Centre service users from December 1st 2015 to December 31st 2017. At Family Centres it was recommended that, where possible, the family's DoCCFS key worker would administer the survey questionnaire to parents/carers and, where applicable, their children. In certain instances where this was not suitable, alternatives were agreed with Centre Managers. It was also recommended that all surveys be administered in person, although accommodations were made for administration to be delivered over the telephone in particular circumstances.

The objective was to collect Time 1 data upon take up of the service and then repeat the exercise close to completion of the work, Time 2. At Family Centres it was a matter of the key worker's professional judgment as to when the optimum time for data collection may be achieved. As a general rule the earlier and later the better, but these goals had to be held in tension with the realities that a relationship may need to be established to facilitate full and honest participation with respect to answers given and that families may have limited investment in such activity when it comes to their final session in the service.

Thus, as a guide, it was recommended that Time 1 data would be collected within one to three sessions of the case being opened, and Time 2 data completed following the Final Review meeting.

The purpose of the survey questionnaire was to generate aggregated data to produce outcome measures, enabling a view to be formed as to pre-post service changes; the purpose was not for individual assessment. The only exception to this rule is in situations where, during the course of data collection, the person being interviewed mentions something by way of an aside that which might indicate danger to themselves or others. The questions asked, however, were not designed to elicit such responses, nor should particular patterns of answers be read as indicative of distress or pressing risks.

Plan for Data Analysis

Data is analysed in the present report in order to describe key characteristics of families attending services provided by the DoCCFS and to determine if attending these services yield positive changes in identified outcome measures. To do this family members complete the range of child, parent and family adjustment scales detailed above prior to engaging with the DoCCFS (pre-intervention or 'Time 1') and again after work with the DoCCFS is complete (post-intervention or 'Time 2'). In order to assess whether the intervention had a measurable impact, average scale scores taken at Time 1 and Time 2 are statistically compared using repeated measures t-tests and analyses of variance (ANOVA). If a positive significant change is observed, this would be an indication of

positive change in pre- to post-intervention scores. Observations of the statistical effect size are then made to determine the magnitude of improvement. The diagram below provides information on how statistically significant changes are determined and how statistical effect size is used as an indicator of the magnitude of improvement.

Interpreting statistically significant change

- Statistical analyses inform us if any change between Time 1 and Time 2 average scores on a measure is 'significant'. The ' p ' values that analyses produce refer to the probability that the changes observed are only due to chance. Typically, p values must be below 5% in order to confidently say that the change in scores is statistically significant. Thus, a $p < .05$ could only have occurred by chance 5 times out of 100, or a $p < .01$ could only have occurred by chance 1 times out of 100.

Interpreting effect sizes

- Where statistically significant change is observed, the magnitude of this change is evaluated by calculating effect sizes. A Cohen's d analysis is conducted. By convention, a Cohen's d value of 0.2 can be considered a 'small' effect size, 0.5 represents a 'medium' effect size and 0.8 a 'large' effect size.

Outline of Report to Follow

The main body of the report that follows is divided into three main sections. The first focuses on findings pertaining to sample characteristics and the evaluation of key outcome measures for the Early Childhood Development Service, while Section Two describes the families and an evaluation of their involvement in Family Centres. As may be deduced from the processes described above, the challenge, going forward, is to move beyond refinement to innovation. In this respect DoCCFS is both ambitious and clear sighted. As such, Section Three of this report will detail plans to use the Adverse Childhood Experiences instrument to better understand the personal histories of services users. This will result in implications for the types of services which could be developed to meet needs where higher numbers of such experiences indicate increased vulnerability to poor outcomes. Finally, the last chapter provides concluding statements and some recommendations for taking forward the aim of making services ever more effective.

SECTION ONE:

Early Childhood Development Service

Chapter Two: Who are the Early Childhood Development Service Users?

The Early Childhood Development Service (ECDS) provides care and education to children aged from two to six years attending pre-school and after-school services across five centres in counties Dublin, Meath and Wicklow. It follows a HighScope curriculum which has been developed from research and practice over a forty year period. This curriculum emphasises active participatory learning and identifies and builds on a child's strengths, interests and abilities. Key development indicators (KDI), identified as the "building blocks of thinking and reasoning" form the curriculum content and children's progress is tracked using the Child Observation Record (COR).

In the reporting period December 2015 to December 2017 the ECDS Centres provided surveys for 442 families². At Time 1 only 7.5% of families engaged with the ECDS service reported that they were receiving any other therapeutic services such as speech and language therapy, hearing impairment support, disability services, and child and adolescent mental health services (CAMHS).

² Although surveys were returned for 442 children attending the ECDS centres, missing data for some questions ranged up to 18%. This missing data is not included in analysis or data presentation. The 'N' value reported indicates the number of cases the results of each analysis are based on.

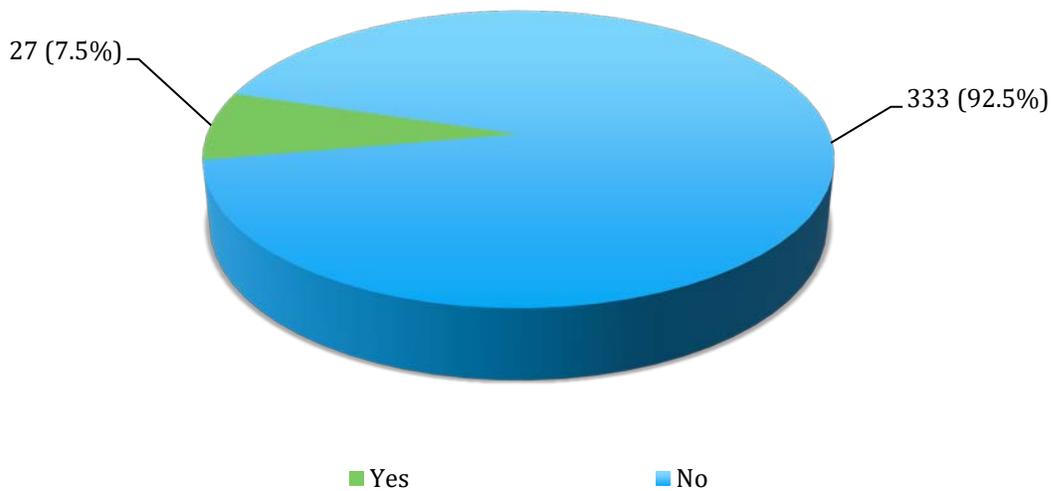


Figure 1: Families in receipt of other therapeutic services (N=360)

The Figures and Tables detailed in the following paragraphs of this chapter provide information on key characteristics of children and families attending ECDS Centres collected at the baseline (Time 1) data collection phase.

Child Characteristics

This section details the demographic information for a total sample of 442 children attending the ECDS Centres. As seen in Table 2, the majority of these children were male (60.3%), Irish (69.7%), and aged 3 to 4 years, or 36 to 47 months (57.6%). The one-third of

children who were reported as being non-Irish represented a wide range of nationalities, including Pakistani, Romanian, Nigerian, Congolese and Indian. Only a small percentage (8.2%) of the children was reported by parents as having ‘*an ongoing chronic physical or mental health problem, illness or disability*’. The most common conditions reported include asthma, autism spectrum disorder (ASD), and speech and language difficulties.

Table 2: Basic demographic information on the children in the ECDS families (Time 1)

		N	%
Age (years) (N = 370)	< 3	91	24.6
	3 - 4	213	57.6
	> 4	66	17.8
Gender (N = 375)	<i>Male</i>	226	60.3
	<i>Female</i>	149	39.7
Nationality (N = 370)	<i>Irish</i>	258	69.7
	<i>Other</i>	112	30.3
Physical or Mental Health Problems (N = 368)	<i>Yes</i>	30	8.2
	<i>No</i>	332	90.2
	<i>Don't know</i>	6	1.6

Figure 2 below details a list of potentially stressful life events that was presented to parents so that they could indicate which ones, if any, their child had experienced. From the 372 parents who completed this section, moving house was the most frequently reported event experienced by 32.3% of children in the evaluation sample. At the other end of the scale, a small percentage of parents (1.9%) reported that their child had experienced an ‘*other disturbing event*’ and gave examples that included homelessness or forced separation of parents.

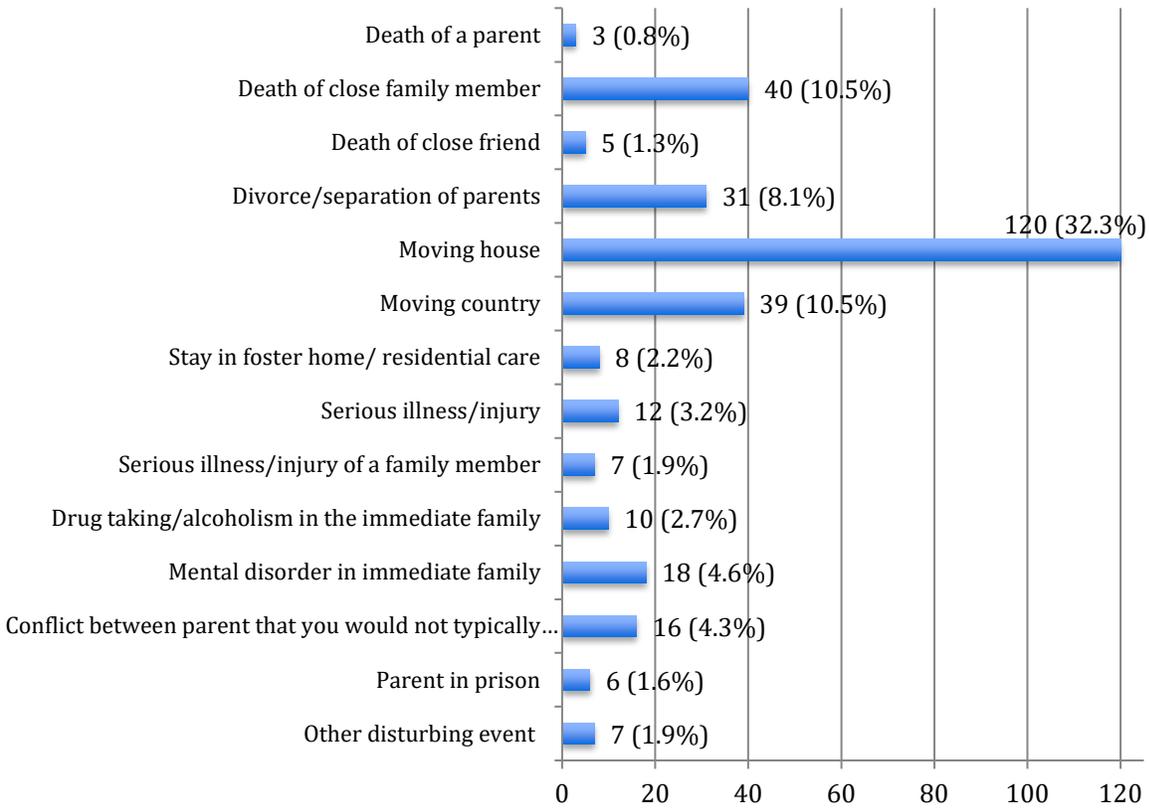


Figure 2: Stressful

life events experienced by children in the ECDS families (N=372, Time 1)

Overall, 50.8% of respondents indicated that their children had experienced at least one of the above-mentioned events in their lives. Figure 3 shows the number of children who experienced multiple stressful events.

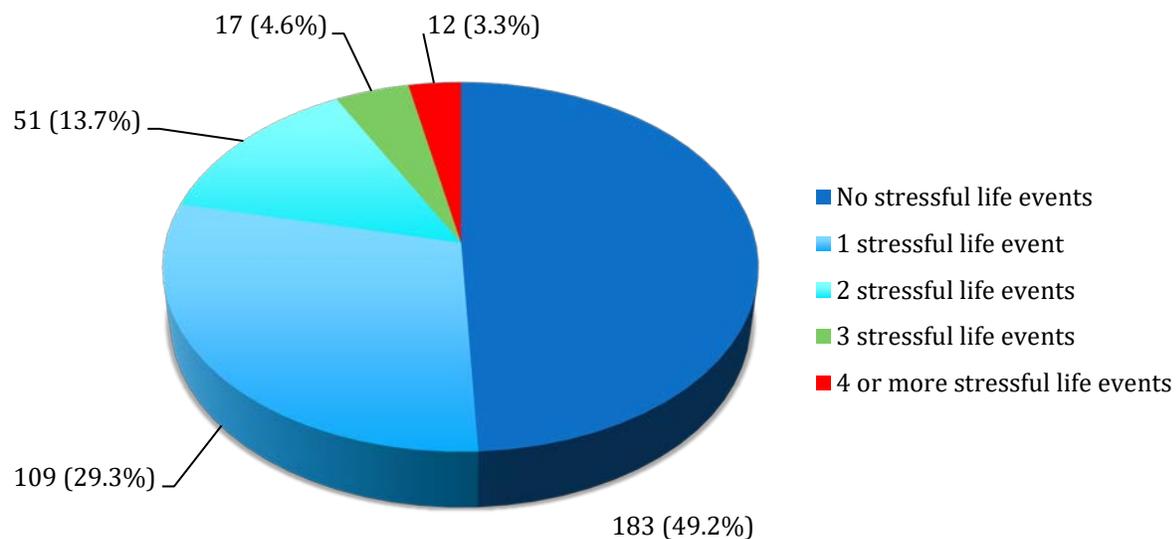


Figure 3: Number of stressful life events experienced by the children in ECDS Centres (N=372)

Parent Characteristics

This section provides an overview of demographic characteristics of adult family members attending the ECDS centers. The majority of these adults (98.6%) indicated that they are the biological parents of children attending the service. Three adults (0.8%) said they were foster parents, and two were either a step-parent/legal guardian or a relative guardian.

As detailed in Table 3 below, most of the respondents were female (76.9%). With regard to age and nationality, the largest proportion of respondents was in the 30-39 years category (57%) and Irish (55%).

Table 3: Basic demographic information on the adults in the ECDS families (Time 1)

	Sub-Group	N	%
Gender (N=347)	<i>Female</i>	267	76.9
	<i>Male</i>	43	12.4
	<i>Both³</i>	36	10.4
Age (N=337)	<20	3	0.9
	20-29	94	27.9
	30-39	192	57.0
	40-49	47	13.9
	50-59	1	0.3
Age of first parenthood (N=362)	<20	62	17.1
	20-29	222	61.3
	30-39	71	19.6
	40-49	7	1.9
Nationality (N=367)	<i>Irish</i>	202	55.0
	<i>Other</i>	165	45.0
Native Language (N=366)	<i>English</i>	202	55.2
	<i>Other</i>	164	44.8

Figure 4 shows information on parents' marital status reported at Time 1. Data was missing for 92 (20.7%) survey respondents. Of those who did respond (N=350), the largest proportion was classified as married (47.1%), followed by single (28.9%) and co-habiting (20.6%). Slightly more than 3% of respondents were separated/divorced or widowed.

³ Both parents (guardians) completed the survey at Time 1.

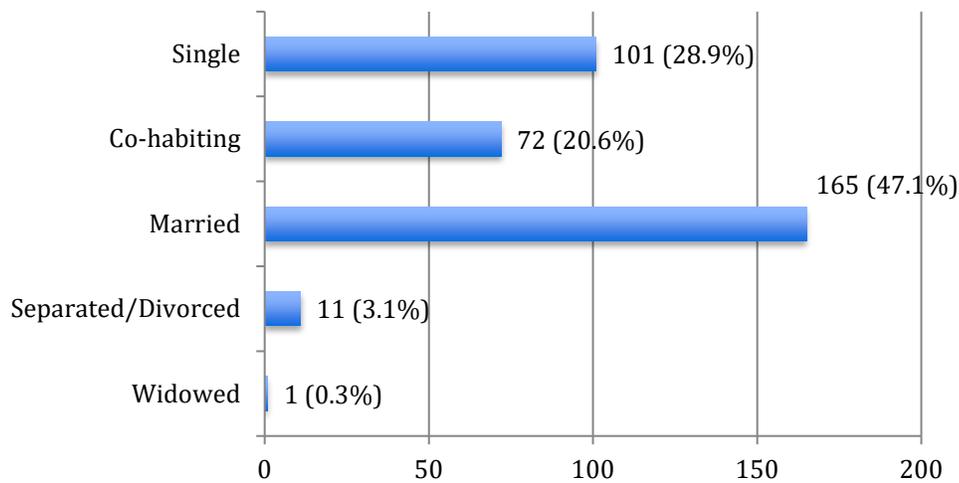


Figure 4: Parents' (guardians') marital status (N=350)

As indicated in Figure 5, over one quarter of respondents had completed their upper secondary school exams and a further fifty percent had completed further higher education from a third level certificate or diploma to postgraduate degree.

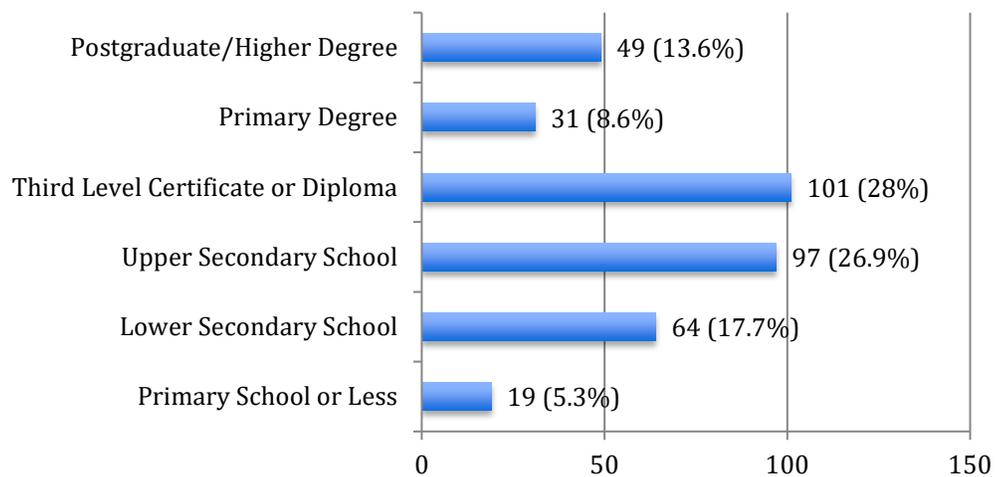


Figure 5: Parents' (guardians') level of education (N=361)

Figure 6 depicts how respondents rated their general health and shows that only a small minority reported their health to be poor (1.4%) or only 'fair' (6.2%), while the majority of adult respondents described their health as 'excellent' (34.3%) and 'very good' (35.9%). Self-reported assessment of respondents' health was unavailable for 16.2% of cases.

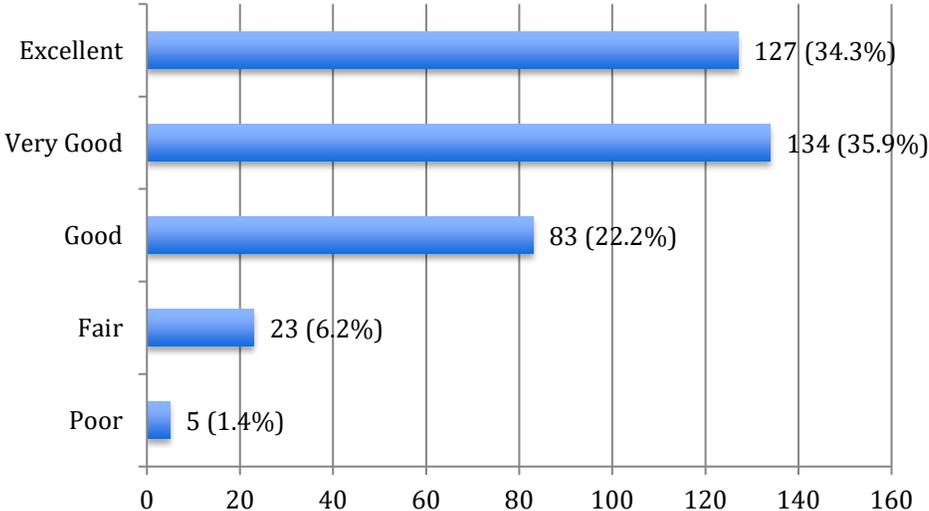


Figure 6: Parents' (guardians') physical health at present (N=370)

Household Characteristics

At the baseline data collection phase (Time 1), survey respondents were also asked to provide information on their household circumstances, including household composition, types of occupancy, main source of income, and the degree of ease or difficulty in making ends meet. Figures 7-10 below offer visual presentation of respondents' answers.

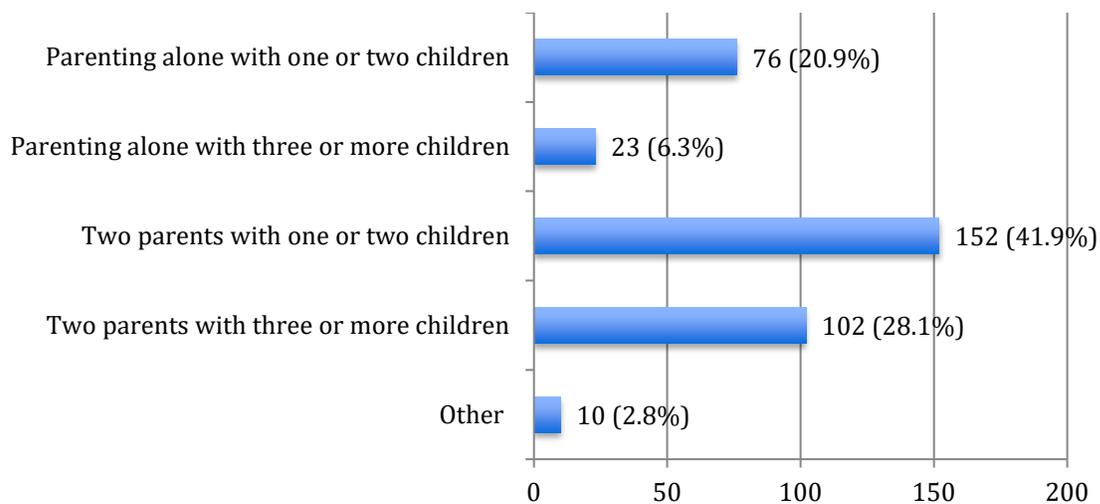


Figure 7: Household composition (N=363)

As seen in Figure 7, the majority of children in ECDS care come from two-parent families (70%). Over one quarter of parents (27.2%) indicated that they were parenting alone. For respondents who reported 'other' household compositions, some examples included co-living and co-parenting with grandparents and other extended family members, and co-parenting a child in two separate households.

Just over sixty per cent of all respondents indicated that they lived in a house (60.9%), over one third lived in an apartment/flat (36.1%), and a small fraction reported that they lived in an accommodation centre/hostel (3%). In addition, respondents were asked to specify the type of occupancy of their family's accommodation. As seen in Figure 8, 53.7% of families were renting their accommodation and 16.7% indicated they were owners. The 'other' category (2.7%) included such responses as living in parents' or other relatives'

house, and staying at an accommodation centre. Information was unavailable for more than 17% of cases.

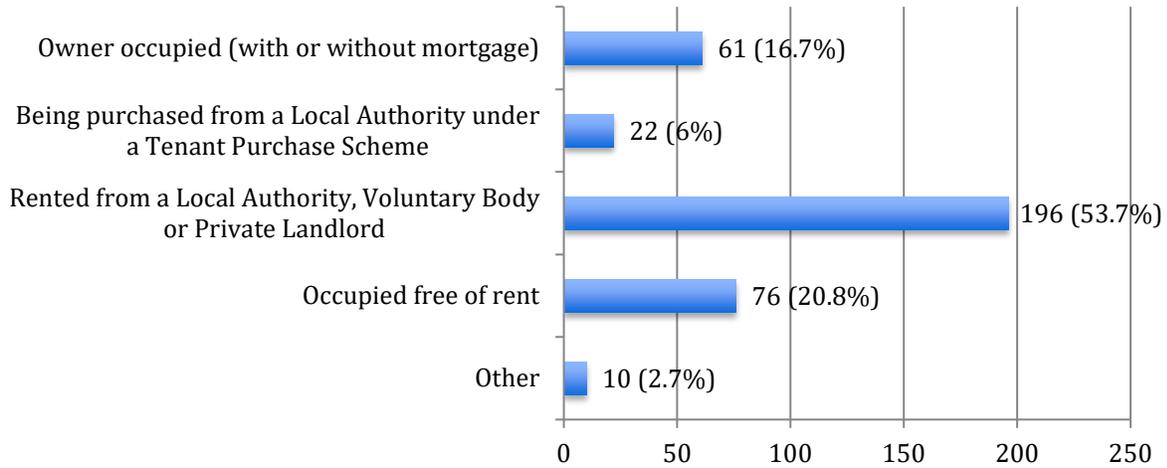


Figure 8: Occupancy of the accommodation (N=365)

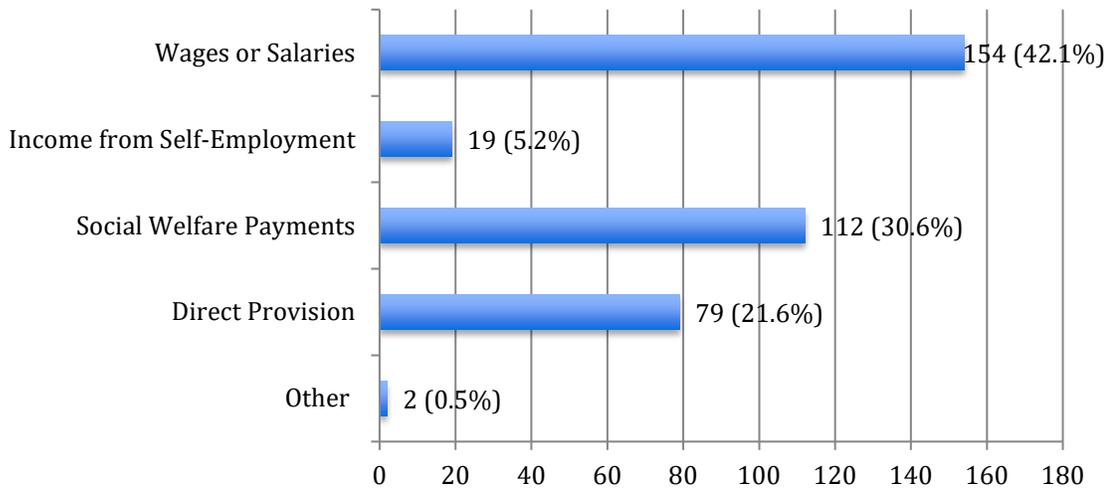


Figure 9: Main source of income in the household (N=366)

Most families attending the ECDS centres receive their main source of household income from wages or salaries (42.1%) or self-employment (5.2%) (Figure 9). One third of all families

(30.6%) rely on social welfare payments to keep their household, and a further 21.6% are in receipt of direct provision⁴. The majority of families report experiencing difficulty 'making ends meet' (65.2%), whereas just over one third (34.8%) state that they can do this with ease (see Figure 10).

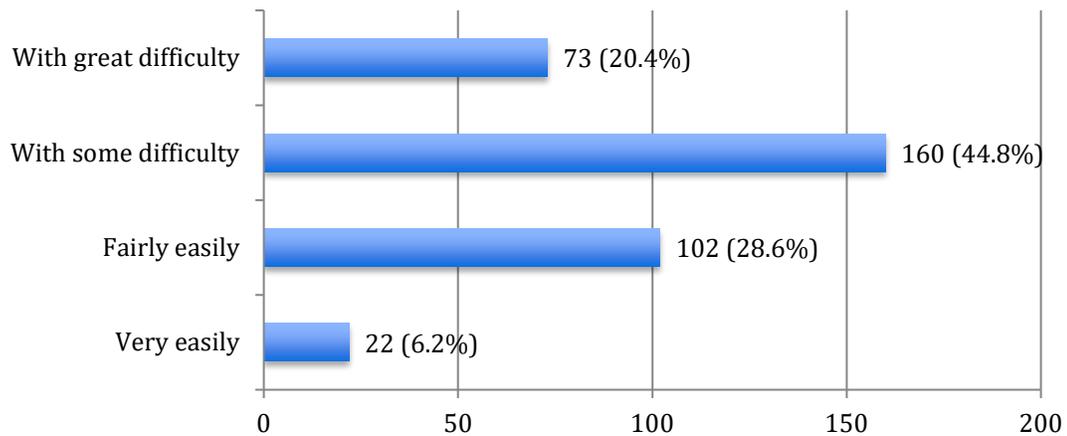


Figure 10: Degree of ease or difficulty of the household to make ends meet (N=357)

⁴ Direct Provision is the current system in Ireland of accommodating and providing for the basic needs of asylum seekers while their asylum applications are being processed.

Chapter Three: What are the Outcomes of the Evaluation?

This chapter describes the analyses that were conducted to determine if children attending ECDS centres and their families experienced positive changes as assessed using a range of outcome measures or scales tapping into child, parent and family adjustment. Scales were completed at the start of the pre-school year (pre-intervention or 'Time 1') and again at the end of the pre-school year (post-intervention or 'Time 2'). Average scale scores taken at Time 1 and Time 2 were then statistically compared using repeated measures t-tests and analyses of variance (ANOVA) and significant changes in the desired direction were taken as an indication that the intervention had a measurable positive impact.

The following sections provide an overview of the results of a number of paired sample t-tests conducted to compare changes in scale scores from Time 1 to Time 2. Prior to running the tests, a missing value analysis was performed for all outcome measures to establish the best way of handling data that was 'incomplete', in that some items from some scales were not answered so that total scale scores could not be computed. Importantly, it should be noted that returned surveys with entire SDQ, MHI-5, CPRS or School Readiness sections unanswered were removed from the analysis.

From 0.5% to 4.8% of returned Time 1 and Time 2 surveys had scales with some missing items. For each Time 1 and Time 2 measure, the Little's chi-square statistic was performed to determine which missing value imputation method was most suitable. The Little

MCAR⁵ tests conducted for each scale indicated that data was missing *completely at random*⁶ and so missing scores were imputed employing the recommended expectation maximization (EM) algorithm (Little & Rubin, 2002). The statistical analysis was conducted with the final sample of 369 respondents who completed SDQ surveys at Time 1 and 216 at Time 2; 356 completed MHI-5 surveys at Time 1 and 212 at Time 2; 369 respondents who completed CPRS sections at Time 1 and 213 at Time 2, and 425 who answered School Readiness questions at Time 1 and 252 at Time 2. Table 4 below presents a summary of all measures used in the survey at Time 1 and Time 2 along with the scale reliability scores. The column 'Matched surveys' indicates numbers of cases that completed both Time 1 and Time 2 surveys on specific measures in the reporting period December 2015 to December 2017.

Table 4: Measures used in Time 1 and Time 2 surveys (N and reliability α)

Scale	Time 1	Time 2	Matched Surveys
SDQ			
<i>Emotional Problems</i>	369 ($\alpha = .60$)	216 ($\alpha = .64$)	203
<i>Conduct Problems</i>	369 ($\alpha = .64$)	216 ($\alpha = .72$)	203

⁵ MCAR stands for 'Missing Completely At Random'.

⁶ The SDQ Time 1 data resulted in a chi-square = 797.26 ($df = 757, p > 0.05$) and SDQ Time 2 data in a chi-square = 376.92 ($df = 377, p=0.491$) which indicated that the data was missing *completely at random*. For the Child-Parent Relationship Scale Time 1 and Time 2 data, a chi-square = 300.01 ($df = 226, p = 0.08$) and a chi-square = 190.87 ($df = 95, p=0.07$), respectively, also suggested that data was missing *completely at random*. The data was missing completely at random for MHI-5 at Time 1 (chi-square = 2.30 ($df = 4, p = 0.09$)) and Time 2 (chi-square = 8.40 ($df = 4, p = 0.08$)). Similarly, School Readiness data was missing completely at random at Time 1 (chi-square = 663.27 ($df = 189, p = 0.18$)) and Time 2 (chi-square = 79.03 ($df = 56, p = 0.29$)).

<i>Hyperactivity</i>	369 ($\alpha = .67$)	216 ($\alpha = .72$)	203
<i>Peer Problems</i>	369 ($\alpha = .46$)	216 ($\alpha = .49$)	203
<i>Prosocial Behavior</i>	369 ($\alpha = .65$)	216 ($\alpha = .68$)	203
<i>Total SDQ</i>	369 ($\alpha = .66$)	216 ($\alpha = .74$)	203
MHI-5	356 ($\alpha = .85$)	212 ($\alpha = .71$)	195
CPRS			
<i>Closeness</i>	369 ($\alpha = .61$)	213 ($\alpha = .70$)	200
<i>Conflict</i>	369 ($\alpha = .78$)	213 ($\alpha = .79$)	200
<i>School Readiness</i>	425 ($\alpha = .91$)	252 ($\alpha = .92$)	244

Children's Emotional and Behavioural Strengths or Difficulties

The Strengths and Difficulties Questionnaire (SDQ) was used to identify emotional and behavioural adjustment in children attending the ECDS service. The questionnaire produces scores for five subscales: *Emotional Problems*, *Conduct Problems*, *Hyperactivity*, *Peer Problems* and *Prosocial Behavior*. Subscale scores can range from 0-10 with higher scores indicating more difficulties, except the *Prosocial Behavior* subscale, where higher scores indicate better adjustment. *Total Difficulties* scores are the sum total of the four 'problem' subscales and can range from 0 - 40 with higher scores indicating more difficulties. Subscale and Total Difficulties scores can also be used to form a four-band categorization of scores from "Close to average" to "Very high". For total scores a value of 0-12 is "Close to Average", 13-15 is "Slightly raised", 16-18 is "High", and 19-40 is "Very high".

Table 5 below provides details of average scores and score categorization for children all together and then broken down by sex. Average scores across all subscales could be classified as “Close to average”.

Table 5: Changes in the average scores of SDQ subscales from Time 1 to Time 2 for the sample as a whole and then for boys and girls separately.

	All Children		Boys		Girls	
	Time 1	Time 2	Time 1	Time 2	Time 1	Time 2
<i>Emotionality</i>	1.8	1.7	1.9	1.6*	1.6	1.9
<i>Conduct</i>	2.5	2.3	2.6	2.3	2.4	2.3
<i>Hyperactivity</i>	3.6	3.3	3.9	3.5*	3.2	2.9
<i>Peer Problems</i>	1.8	1.7	1.6	1.7	2.1	1.7
<i>Prosocial Behaviour</i>	7.9	8.2*	7.7	8.1*	8.1	8.3
<i>Total Difficulties</i>	9.6	9.0	9.9	9.1*	9.2	8.8

* Statistically significant improvement from Time 1 to Time 2 ($p < .05$)

For the sample as a whole average scores on all ‘problem’ measures and Total Difficulties decreased from Time 1 to Time 2, though not to an extent that was statistically significant.

Average scores on the strength measure of *Prosocial Behavior* increased significantly from Time 1 ($M=7.9, SD=1.82$) to Time 2 ($M=8.2, SD=1.79$) ($t(202)=-2.49, p < .05$, effect size=0.2).

A repeated measures ANOVA test was performed to measure the changes in SDQ Total scores between Time 1 and Time 2 for boys and girls. Results of this test showed that there were no statistically significant differences in Total Difficulties at Time 2 between

girls and boys ($F(1, 199)=2.92, p>.05$). In addition, significant improvements were found in the sample of boys with regard to emotionality ($t(124)=1.76, p<.05, \text{effect size}=0.2$), hyperactivity ($t(124)=1.99, p<.05, \text{effect size}=0.2$), prosocial behaviour ($t(124)=-2.20, p<.05, \text{effect size}=0.2$), and their Total Difficulties scores that decreased significantly from Time 1 to Time 2 ($t(124)=2.04, p<.05, \text{effect size}=0.2$). No significant changes were found for girls, although it should be noted that to begin with their Time 1 scores for Total Difficulties and all but the Peer Problems subscale indicated slightly less problematic behavior than that reported for their male peers. It should also be noted that average scores across all subscales and Total Difficulties were in the normal range at both data collection time points.

SDQ Scale developers have estimated that approximately 8% of children in the general population score in the range of total difficulties that categorises them as having high or very high levels of emotional and behavioural problems. In the present sample, 14% of children scored in this range ($n = 31$). Figure 11 below shows the average scores on each subscale of the SDQ as well as the Total Difficulties scores for these children for Time 1 and Time 2. All Time 1 subscale scores can be categorized as highly or very highly problematic. Statistically significant improvements were made from Time 1 to Time 2 with regard to conduct ($t(30)=3.26, p<.05, \text{effect size}=0.5$), hyperactivity ($t(30)=3.78, p<.05, \text{effect size}=0.6$), prosocial behaviour ($t(30)=-2.86, p<.05, \text{effect size}=-0.5$), and the Total Difficulties scale ($t(30)=3.47, p<.05, \text{effect size}=0.7$).

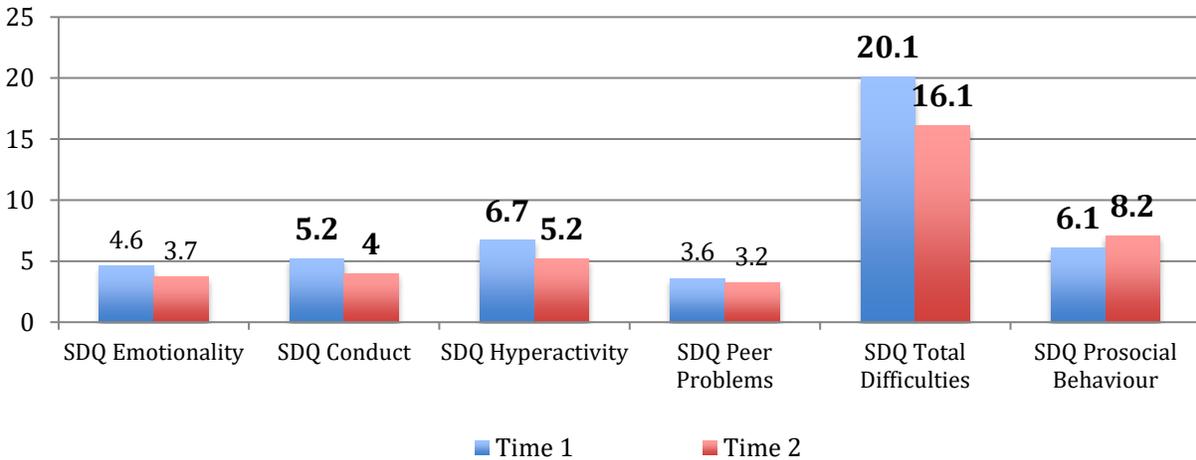


Figure 11: Changes in the average scores of SDQ subscales from Time 1 to Time 2 for the sample of children with high levels of emotional and behavioural problems (N=31)

Parents' Mental Health

The Mental Health Inventory (MHI) is a measure used widely to evaluate mental health issues such as anxiety, depression, and general distress. In this survey, an abbreviated MHI-5 instrument is used to measure overall emotional functioning among parents. Scores on the MHI-5 can range from 0 to 100 with higher scores reflecting greater wellbeing.

Results of a paired-sample t-test showed that, while there is a positive trend in improving parents' mental wellbeing from Time 1 ($M=76.3$, $SD=18.43$) to Time 2 ($M=77.5$, $SD=17.30$), this change was not statistically significant ($t(194)=-0.86$, $p>.05$). Visual representation of the changes in average MHI-5 scores across time is seen in Figure 12.

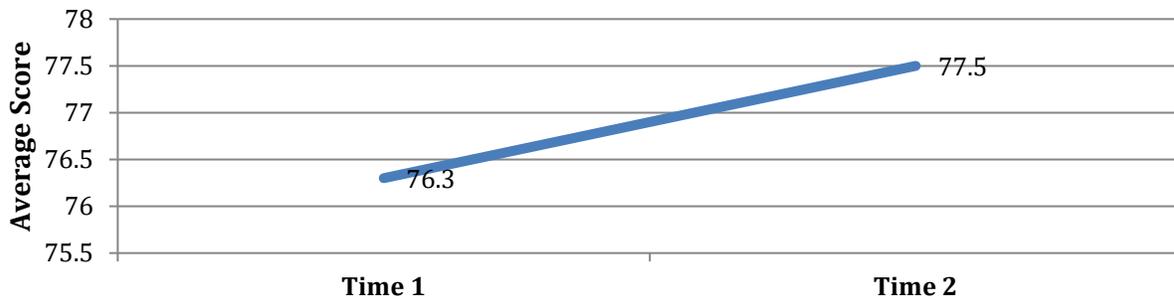


Figure 12: Changes in the average scores of MHI-5 scale from Time 1 to Time 2

A repeated measures ANOVA test was performed to measure the changes in MHI-5 scores between Time 1 and Time 2 for Irish and non-Irish parents (guardians). Results of the test showed that there were statistically significant differences between the two groups of parents (guardians) ($F(2,190)=3.43, p<.05$). Two independent sample t-tests were performed to explore these differences further and to compare MHI-5 mean scores among Irish and non-Irish parents (guardians) separately at Time 1 and Time 2. As seen in Figure 13 below, there were significant differences in MHI-5 mean scores between Irish and non-Irish parent groups at Time 1 ($t(348)=3.38, p<.05, \text{effect size}=0.4$) and Time 2 ($t(194)=1.89, p<.05, \text{effect size}=0.2$) in that, Irish parents reported significantly higher wellbeing than their foreign-born counterparts. Both groups showed improvements in their wellbeing from Time 1 to Time 2 but the results of a paired sample t-test showed that these improvements were not statistically significant for either group [Irish parents (guardians) ($t(118)=-.58, p>.05$); foreign-born parents/guardians ($t(72)=-.82, p>.05$)].

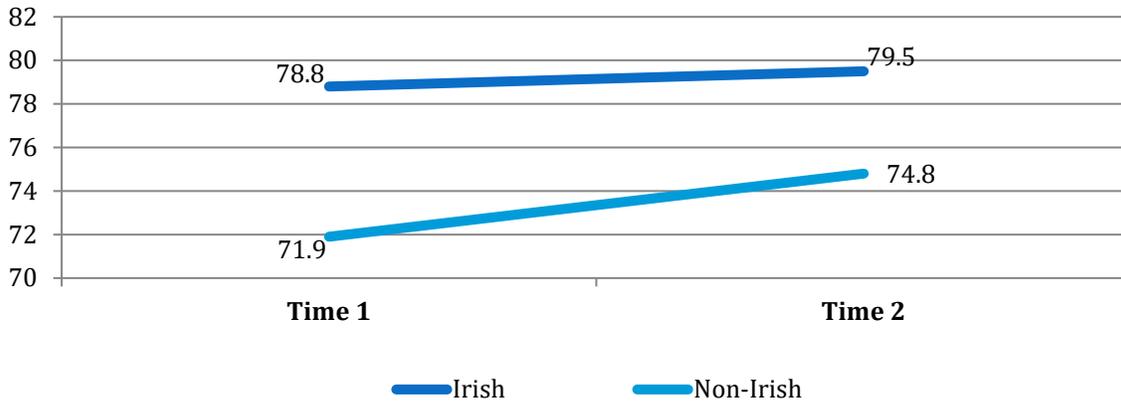


Figure 13: Changes in the average scores of MHI-5 scale from Time 1 to Time 2 among Irish and non-Irish parents / guardians

Finally, for this measure, parents (guardians) who reported low levels of mental health and wellbeing at Time 1 (N=22) were analysed separately. Low scores were deemed to be <52 (the recommended cut-off value to screen for depressive disorders) when the overall mean for Time 1 was 75.7. Just over ten percent (10.4%) of all parents scored in this low range on MHI-5. Figure 14 below depicts significant changes in the average scores from Time 1 ($M=35.1$, $SD=9.23$) to Time 2 ($M=61.6$, $SD=23.63$) for these carers ($t(21)=-5.56$, $p<.01$, effect size=1.47). Examination of the effect size indicates an improvement in reported mental health by over one standard deviation, suggesting that parents with particularly low self-reported wellbeing at Time 1 improved greatly over the course of the ECDS programme, although it should be noted that their Time 2 scores are still below the average.

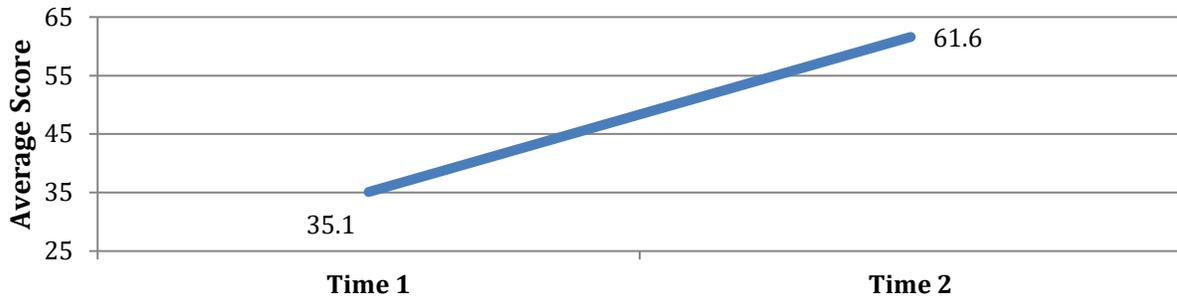


Figure 14: Changes in the average scores of MHI-5 scale from Time 1 to Time 2 among parents (guardians) with lowest MHI scores at Time 1 (N=22)

Child-Parent Relationship

Quality child-parent relationships are a family process that are especially important for the wellbeing of both children and their parents. In the present study the Child-Parent Relationship Scale (CPRS) assessed parents' perceptions of their relationships with their children. The 15-item version of the CPRS measure was used in the survey. The 7-item *Closeness* subscale assesses the extent to which a parent (guardian) feels that the relationship with a child is characterized by warmth, affection, and open communication. Scores can range from 7-35 with higher scores indicating closer relationships. The 8-item *Conflict* subscale measures the degree to which a parent (guardian) feels that his or her relationship with a particular child is characterized by negativity. Scores on the CPRS *Conflict* scale can range from 8-40 with higher scores indicating more tense or conflictual relationships. The *Conflict* and *Closeness* scales of the CPRS represent two distinct domains of parent-child relationships, as evidenced by a relatively low correlation between the scales ($r = .25$).

Results of paired-sample t-tests for the sample as a whole showed that there was no statistically significant difference in the CPRS *Closeness* scores between Time 1 (M=32.7, SD=2.99) and Time 2 (M=32.8, SD=3.23) as reported by the ECDS parents ($t(199)=-0.48$, $p>.05$). Similarly, no statistically significant change in the CPRS *Conflict* subscale scores was found between Time 1 (M=16.0, SD=6.28) and Time 2 (M=15.8, SD=6.58) ($t(199)=-0.39$, $p>.05$) (see Figure 15).

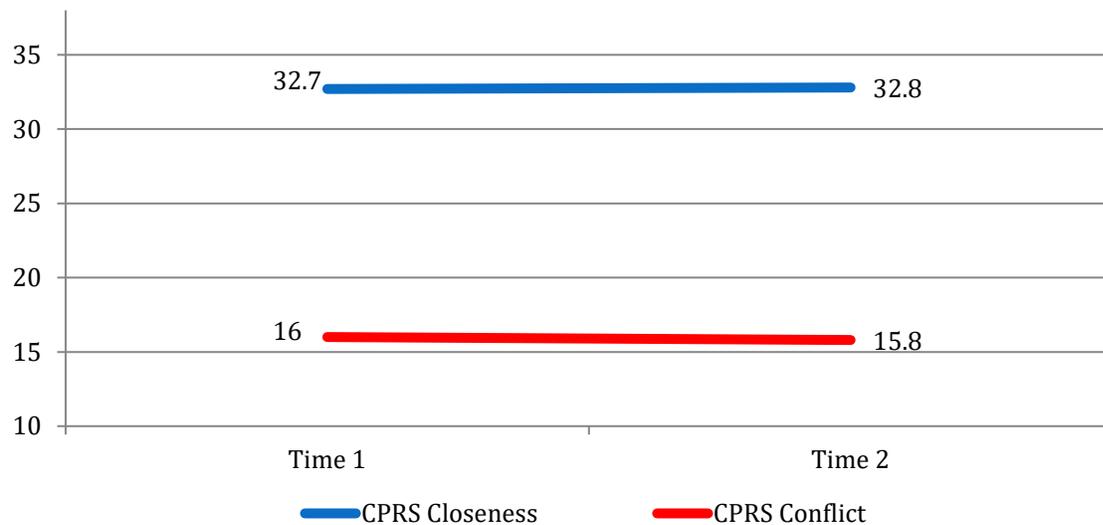


Figure 15: Changes in the average scores of CPRS *Closeness* and *Conflict* subscales from Time 1 to Time 2 for the sample of all children in ECDS centres

Next, changes in the CPRS *Closeness* and *Conflict* scores were tested in the sample of children with high or very high levels of emotional and behavioural problems reported at Time 1 (N=31). While the results indicate a positive trend in the CPRS *Closeness* and *Conflict* scores for this groups of children (see Figure 16 below), these changes were not statistically significant [*Closeness* ($t(30)=-0.69$, $p>.05$) and *Conflict* ($t(30)=-1.00$, $p>.05$)].

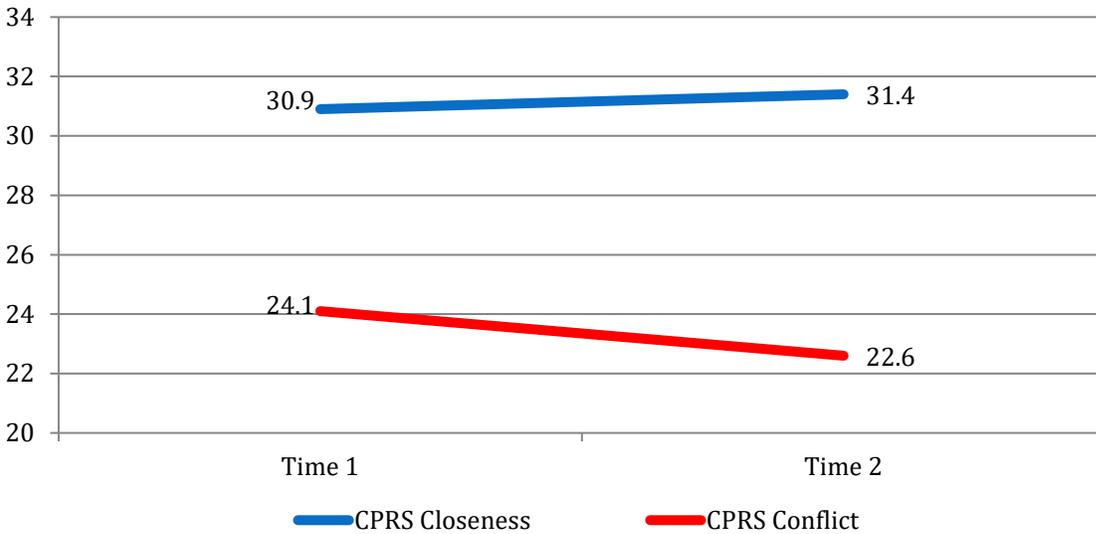


Figure 16: Changes in the average scores of CPRS *Closeness* and *Conflict* subscales from Time 1 to Time 2 for the sample of children with high and very high emotional and behavioural problems (N=31)

School Readiness

Children who are ‘school ready’ enter the learning environment willing and able to engage with and benefit from the learning experiences they will encounter. In the present study aspects of social-emotional adjustment, language development and facilitating learning approaches are tapped into using the Santa Barbara School Readiness Scale (SBSRS) scale. Total scores can range from 0-45 with higher scores indicating better school adjustment.

Results of paired-sample t-tests for the overall sample are depicted in Figure 17 below and revealed that there was a statistically significant increase in School Readiness scores

from Time 1 ($M=35.4$, $SD=6.34$) to Time 2 ($M=39.3$, $SD=5.68$) as reported by the ECDS workers ($t(243)=-11.56$, $p<.001$, effect size=0.92). Independent t-tests were performed with Time 1 and Time 2 data separately to compare the mean scores of School Readiness for boys and girls attending the ECDS centres. Results of these tests showed that at both Time 1 and Time 2, School Readiness mean scores were significantly higher among girls than boys (for Time 1, $t(341)=-4.28$, $p<.001$, effect size=0.46; and for Time 2, $t(220)=-4.03$, $p<.001$, effect size=0.54). Paired sample t-tests showed significant differences for both boys' and girls' school readiness scores from Time 1 to Time 2 (Boys: Time 1 [$M=34.6$, $SD=6.44$] Time 2 [$M=38.6$, $SD=5.60$] $t(120)=-9.04$, $p<.001$, effect size=-0.69; Girls: Time 1 [$M=37.4$, $SD=5.66$] Time 2 [$M=41.2$, $SD=4.57$] $t(84)=-8.13$, $p<.001$, effect size=0.66).

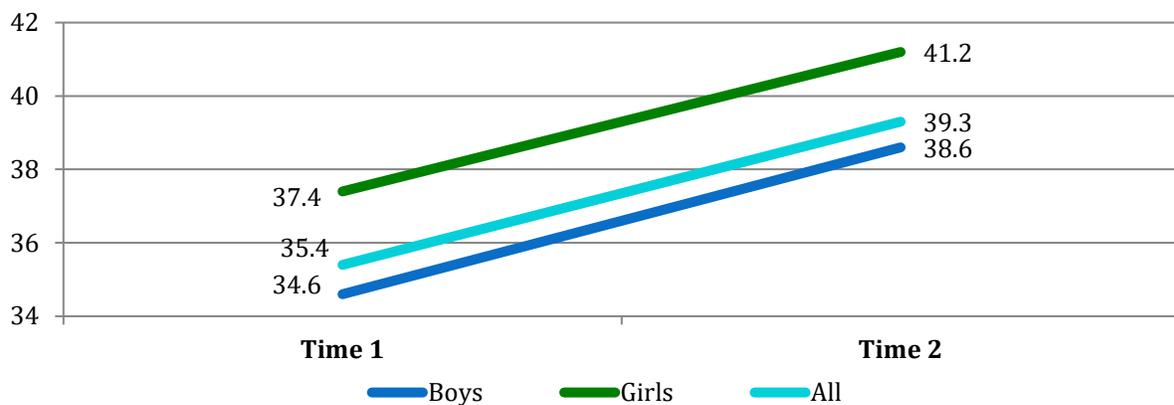


Figure 17: Changes in the average scores of School Readiness scale from Time 1 to Time 2 for the overall sample and by child's gender

With respect to children who were classified as being of Irish or non-Irish nationality, the results of independent t-tests showed that at Time 1, school readiness mean scores were significantly higher among Irish ($M=36.5$, $SD=6.14$) as compared to non-Irish children

($M=34.0$, $SD=5.08$) ($t(337)=3.59$, $p<.001$, effect size=0.39). Repeated measures t-tests for the sample of Irish and non-Irish children showed significant improvements between Time 1 and Time 2 school readiness scores (Irish: Time 1 [$M=36.5$, $SD=6.14$] Time 2 [$M=40.2$, $SD=5.08$] $t(148)=-9.61$, $p<.001$, effect size=-0.64; Non-Irish: Time 1 [$M=34.0$, $SD=5.08$] Time 2 [$M=38.6$, $SD=4.75$] $t(49)=-7.14$, $p<.001$, effect size=-0.94). The difference between Irish and non-Irish children's school readiness scores were non significant at Time 2 ($t(217)=1.50$, $p<.05$) indicating that both groups of children had improved in terms of being 'school ready' and were no longer significantly different from each other at Time 2 (see Figure 18).

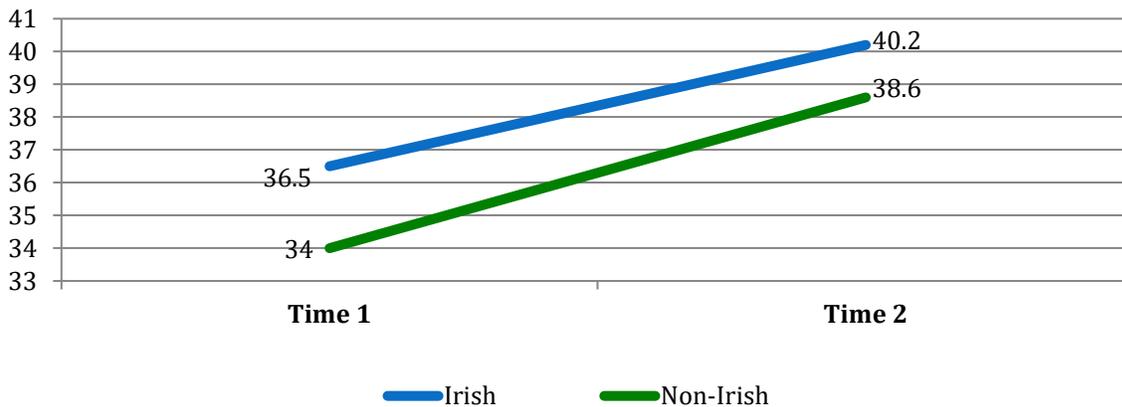


Figure 18: Changes in the average scores of School Readiness scale from Time 1 to Time 2 by child's nationality

Chapter Four: Section Summary

This section first described key characteristics of children and families attending ECDS Centres. It then presented results of analyses conducted to determine if these children and families experienced positive changes from pre-intervention or 'Time 1' to post-intervention or 'Time 2', as assessed using a range of outcome measures reflecting child, parent and family adjustment. Key findings include the following:

Family Characteristics

- Children attending ECDS centres are typically aged between 36 and 47 months. The majority are Irish, but thirty per cent represent a wide range of nationalities, such as Pakistani, Romanian, Nigerian and Congolese. The children are predominantly in good health with only a small percentage (8.2%) reported by parents as having conditions such as asthma, autism spectrum disorder (ASD), and speech and language difficulties.
- Half of all children were reported by parents as having experienced at least one stressful life event, such as moving house, illness, or death in the family.
- The vast majority of adult respondents to our survey were the biological parents of children attending the service. Most were female, married, aged from 30 to 39 years and had completed upper secondary school exams or higher education ranging from a third level certificate or diploma to a postgraduate degree. Similar proportions of Irish and non-Irish families were observed.

- The majority (70%) of children in ECDS care come from two-parent families. Just over a quarter of parents (27.2%) indicated that they were parenting alone. For respondents who reported 'other' household compositions, some examples included co-living and co-parenting with grandparents and other extended family members, and co-parenting a child in two separate households.
- Most families attending the ECDS centres receive their main source of household income from wages or salaries or self-employment. Just under one third of all families rely on social welfare payments to keep their household, while 21.6% are in receipt of direct provision. Just over half of families report experiencing difficulty 'making ends meet' (65.2%).

Children's Emotional & Behavioural Adjustment

- Average scores on the measures of adjustment for the whole sample of children were in, or close to, the normal range at both Time 1 and Time 2 data collection points. Improvements on all measures were noted, though only prosocial skills improved to an extent that was statistically significant. When the children were considered separately by sex, boys showed significant improvements with regard to levels of emotionality and hyperactivity, specifically, and their combined score on total difficulties (which also considers conduct problems and peer relationship issues).
- The developers of the measure used have estimated that approximately 8% of children in the general population score in the range of total difficulties that categorises them as having high or very high levels of emotional and behavioural

problems. In the present sample, 14% of children scored in this range (n = 31). For this group of children average scores on scales assessing conduct, hyperactivity, prosocial skills and overall difficulties showed statistically significant improvements from Time 1 to Time 2. Effect sizes indicated that these changes are considerable.

Parents' Mental Health

- The measure of overall emotional functioning among parents indicated that there is a positive trend in improving parents' mental wellbeing from Time 1 to Time 2, but this change was not statistically significant.
- Comparing the average scores among Irish and non-Irish parents (guardians) showed that, at both time points, the non-Irish parent groups report significantly poorer mental health than their Irish counterparts. However, the examination of effect sizes suggests that this gap is closing at Time 2, where positive trends in reports of mental wellbeing were seen.
- Parents who reported low levels of mental health and wellbeing at Time 1 (10.4%) were analysed separately. Highly significant positive changes in their average scores from Time 1 to Time 2 were observed. Examination of the effect size indicates an improvement in reported mental health by over one standard deviation, suggesting that parents with particularly low self-reported wellbeing at Time 1 improved greatly over the course of the ECDS programme, although it should be noted that their Time 2 scores are still below the average noted for the larger group of parents.

Child-Parent Relationship

- The Child-Parent Relationship Scale (CPRS) assessed parents' perceptions of closeness and conflict their relationships with their children. An examination of average scores indicated that parents reported very high levels of closeness with their children (average score of 33 out of a scale from 7 to 35) and relatively low levels of conflict (average score of 16 out of a scale from 8 to 40). Scores did improve at Time 2 but not to the extent that they were statistically significant.

School Readiness

- School readiness was assessed by scoring aspects of children's social-emotional adjustment, language development and facilitating learning approaches. There was a highly statistically significant positive change for the whole sample from Time 1 to Time 2, as reported by the ECDS workers. Comparing average scores of School Readiness for boys and girls separately showed that at both Time 1 and Time 2, girls were significantly more 'school ready' than boys, but statistically significant improvements were made for both groups over the course of the preschool year.
- With respect to children who were classified as being of Irish or non-Irish nationality, at Time 1 school readiness average scores were significantly higher among Irish children. However, both groups showed significant improvements between Time 1 and Time 2 so that the difference between Irish and non-Irish children's school readiness scores were not significant at Time 2.

In comparison with a nationally representative sample of similar-aged children described

in Growing Up in Ireland (GUI), the Irish longitudinal study of children (Williams, Murray, McCrory, & McNally, 2013), the children attending ECDS centres share a number of similarities while also differing on some dimensions. With regard to their family characteristics, a higher proportion of parents with children attending the ECDS centres are non-Irish (45% ECDS vs 20.8% GUI) and head single-parent homes (27.2% ECDS vs 14% GUI). Considering how both migrant and one-parent families in Ireland are reported as being particularly socially disadvantaged (e.g. Growing Up in Ireland, 2013; Röder, Ward, Frese, & Sánchez, 2014) these children may have particular needs in their circumstances. For example, single-parent families experience disadvantage in terms of household income and maternal education (Growing Up in Ireland, 2013) and their rate of persistent deprivation is 26% higher than that experienced by adults from two-parent homes (Watson, Maître, Grotti, & Whelan, 2018). Yet, for the ECDS service users as a whole, their reports of children's experiences of early life stress and the degree of ease or difficulty their households have making ends meet are very similar. Specifically, in both groups approximately half of all children were reported as encountering at least one adverse event in their young lives. This was most commonly reported as 'moving house'. In addition, the percentages of families attending ECDS reporting some financial difficulties is 65.2% in comparison with 67% of GUI families (Growing Up in Ireland, 2013).

Considering how average scores on the measures of children's emotional and behavioural strengths and difficulties were in, or close to, the normal range at Time 1, it is encouraging to see that improvements at Time 2 were still noted, significantly so with

regard to boys' and girls' pro-social skills and boys' hyperactivity and general adjustment. In *Growing Up in Ireland* (2013), 12.5% of five year olds could be categorized as having high or very high levels of emotional and behavioural problems. This proportion is similar to that noted in the ECDS sample where 14% of children were experiencing similar levels of difficulty. Among this group, improvements noted from Time 1 to Time 2 with regard to conduct, hyperactivity, prosocial skills and overall difficulties were considerable, suggesting that children experiencing the greatest amount of difficulties reap the most benefits from their engagement with early childhood services. This is an important finding as a plentitude of research indicates that social, emotional or behavioural issues that manifest in the early years cast long shadows forward onto a range of domains of child, and later adult, wellbeing (Deater-Deckard, Dodge, Bates & Pettit, 1998; Petersen, Bates, Dodge, Lansford, & Pettit, 2015).

Similar trends were noted with regard to parents' mental health. While the change observed in the mental wellbeing of the entire sample from Time 1 to Time 2 was positive, it was not statistically significant. However, the group average score was high (76.3) even at Time 1 and comparable with average scores for other adult groups [75 in an Australian population (Roy & Schurer, 2013) and 81.7 in an Irish population (Ipsos MRBI, 2016)], so perhaps the scope for improvements were limited. However, among parents with low levels of mental health and wellbeing at Time 1 reports of improvements at Time 2 were highly significant. While their Time 2 scores were still lower than the group average, this finding suggests that these individuals particularly benefitted following engagement with early childhood services and may continue to improve with more targeted

intervention.

In terms of parents' reports of closeness and conflict in their encounters with their children, the ECDS sample scores closely reflect those reported by GUI (Williams et al., 2013) and indicate that parents and children typically enjoy warm, nurturing, relationships with each other. Thus, while positive trends were noted from Time 1 to Time 2 for the ECDS sample, it is not surprising that these improvements were not statistically significant. It should be noted that as the dynamics of parent-child interactions alter and become more demanding from the preschool years to adolescence, so too may the quality of parent-child relationships. However, these early indicators of parental sensitivity are important as close attachments with primary caregivers are central to children's socio-emotional development (e.g. Sroufe, 2005).

Finally, the ECDS children improved significantly over the school year with regard to their school readiness. This was gauged by ECDS staff as they rated children's development with regard to social-emotional adjustment, language and facilitating learning approaches. Of course, positive trends here might be expected anyhow as a result of children's natural maturation and development over time, but the levels of change are nonetheless encouraging. This is particularly the case when examining progress made by non-Irish preschoolers over the academic year where, by Time 2, they no longer lagged behind their Irish counterparts with regards to their preparedness for primary schooling.

SECTION TWO:

Family Centre Service

Chapter Five: Who are the Family Centre Families?

Family centres provide a range of needs-led supportive therapeutic services for children and their families. The therapeutic approach is solution-focused and strengths-based and can include individual sessions, family sessions, group work, parenting support, and outreach home visits.

In the reporting period December 2015 to December 2017 the Family Centres provided surveys for 968 families⁷, 911 at Time 1 and 504 at Time 2. A total of 452 families across all Family Centres completed both Time 1 and Time 2 surveys⁸.

As seen in Figure 19, 28.7% of families enrolled in the Family Centres reported that they were in receipt of other intervention or therapeutic services, citing child and adolescent mental health services (CAMHS), occupational, speech and language therapies, Cognitive Behavioural Therapy, private counseling and Lucena clinic services. Data was reported as missing (i.e. survey question left unanswered) for 8.4% of all survey respondents.

⁷ Missing data for some questions varied from 5.5% to 15%. This missing data is not included in analysis or data presentation. The 'N' value reported indicates the number of cases the results of each analysis are based on.

⁸ Additional analyses were performed to compare families who completed Time 1 and Time 2 surveys with families who disengaged with the service and only completed the survey at Time 1. The Results of these analyses are available in Appendix A.

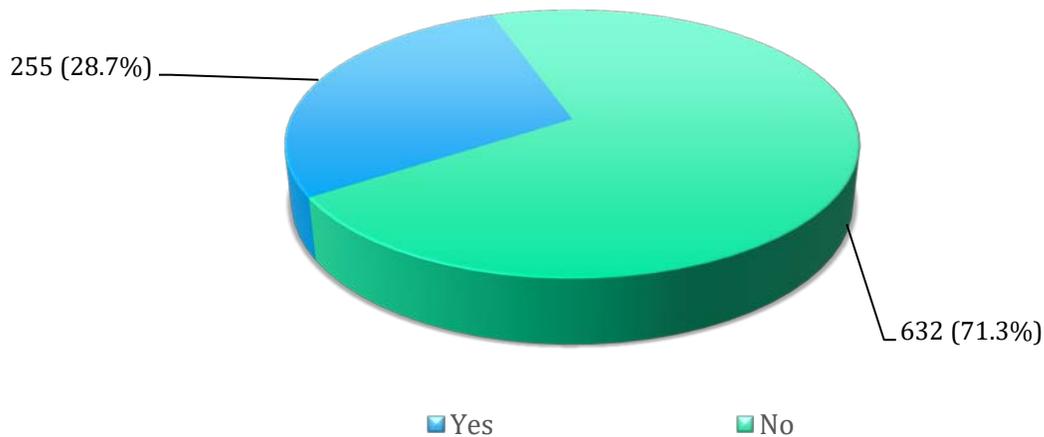


Figure 19: Families in receipt of other therapeutic services (Family Centres data, N=887)

The Figures and Tables detailed in the following paragraphs of this chapter provide information on key characteristics of children and families attending Family Centres collected at the baseline (Time 1) data collection phase.

Child Characteristics

Table 6 below presents demographic information on a total sample of 968 children and youth involved in Family Centre services. These children ranged in age from infants to 18 years but the majority (64%) were aged 5 to 12 years. Similar proportions of the children were male (54%) and female (46%). Over ninety five percent of the children were Irish (95.3%). Among non-Irish children, most were from Eastern European countries

(Poland, Lithuania, Romania, Moldova), West Europe (Spain, Germany, the UK) and African countries (Democratic Republic of Congo, Nigeria, Cameroon). Just under a quarter of all children (23.8%) were reported to have physical or mental health problems (83% of these had their health problems diagnosed by a professional). Anxiety, ADHD, ODD, asthma, dyslexia, and speech and language difficulties were among the most frequently mentioned physical and mental health problems in the Family Centre sample.

Table 6: Basic demographic information on the children in the Family Centre families (Time 1).

		N	%
Age (years) (N=895)	< 2	10	1.1
	2 - 4	54	6.0
	5 - 12	575	64.2
	13 - 18	256	28.6
Gender (N=903)	<i>Male</i>	488	54.0
	<i>Female</i>	415	46.0
Nationality (N=903)	<i>Irish</i>	861	96.3
	<i>Other</i>	42	4.7
Physical or Mental Health Problems (N=899)	<i>Yes</i>	214	23.8
	<i>No</i>	662	73.6
	<i>Don't know</i>	23	2.6

Surveys completed by parents at both rounds also asked whether their children experienced any particularly stressful events in the lives. Of 906 cases, divorce or

separation of parents was the most frequently reported event experienced by 60.2% of children in the evaluation sample. According to parents' reports, over half of a sample of children (54%) witnessed a conflict between parents, which was described as "*conflict that you would not typically want your child/ren to witness*". Half of the children in the sample also were reported to have changed living locations (53.1%), and substantial proportions have experienced a death of close family member (39.7%), or witnessed drug taking or/and alcoholism in the immediate family (30.5%). Over one quarter of all children (26.5%) have faced mental illness in the immediate family and 19.8% have experienced serious physical illness or injury of a family member. Figure 20 below provides the percentages for all listed stressful life events. For the 18.4% of children who have experienced an 'Other disturbing event', examples such as periods of homelessness, domestic violence and abusive behaviour from biological parents, and sibling separation were cited.

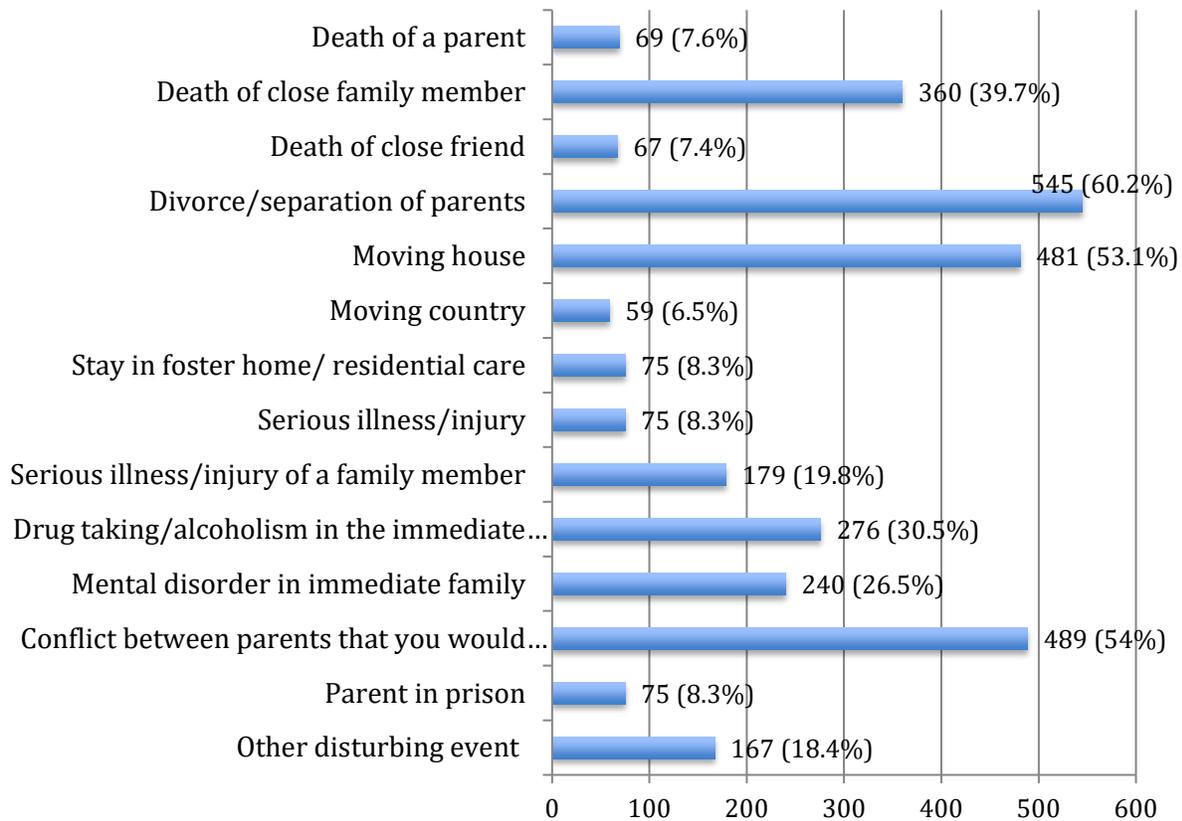


Figure 20: Stressful events experienced by children in the Family Centre families (N=906)

Figure 21 shows proportions of children in the Family Centres who experienced multiple stressful events in their lives. Only 6.2% of children had no such early adversity, while forty five percent of children were reported as experiencing four or more such stresses.

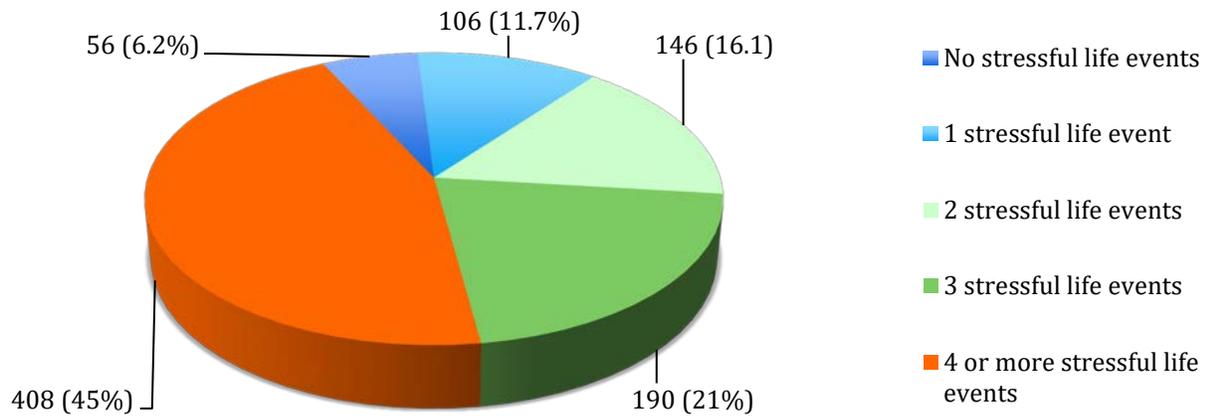


Figure 21: Number of stressful life events experiences by the children in the Family Centres (N=906)

Parent Characteristics

This section overviews demographic characteristics of adult family members attending DoC Family Centres. According to the Time 1 data, the large majority of all adults (817 or 90.8%) reported they were biological parents to the children attending services, and the remaining identified themselves as foster parent (30 or 3.3%), relative or unrelated guardian (31 or 3.4%), step-parent or legal guardian (15 or 1.7%), or adoptive parent (7 or 0.8%). Table 7 below presents further demographic information on the adults attending the Family Centres.

With respect to caregiver's gender, 11.3% were male and 84% were female, while the remaining 4.7% of surveys were completed by both parents. Most adults were between the age of 30 - 39 (42.1%) and 40 - 49 (35.9%). Over half of the sample (51.6%) responded

that they first became parents between the ages of 20–29 and 24.4% said they first became parents when they were aged 20 or younger. The large majority of respondents were Irish (88.8%). The 11.2% who indicated ‘Other’ nationality were Nigerian, English, Latvian, Lithuanian and Polish. Approximately 88% indicated English as their native language. Among the 12.1% who had another native language, French, Polish, Yoruba and Spanish were the most commonly mentioned

Table 7: Basic demographic information for adults attending Family Centres (Time 1)

	Sub-Group	N	%
Gender (N=705)	<i>Male</i>	80	11.3
	<i>Female</i>	592	84.0
	<i>Both⁹</i>	33	4.7
Age (N=857)	<i>20-29</i>	99	11.6
	<i>30-39</i>	361	42.1
	<i>40-49</i>	308	35.9
	<i>50-59</i>	80	9.3
	<i>60-69</i>	9	1.1
Age of first parenthood (N=858)	<i><20</i>	209	24.4
	<i>20-29</i>	443	51.6
	<i>30-39</i>	191	22.3
	<i>40-49</i>	15	1.7
Nationality (N=865)	<i>Irish</i>	768	88.8
	<i>Other</i>	97	11.2
Native Language	<i>English</i>	759	87.9
	<i>Other</i>	104	12.1

⁹ Indicates that both parents completed the survey.

Figure 22 below shows information on parents' marital status reported at Time 1. Data was unavailable for 98 (10.1%) survey respondents. Of those who did respond (N=870), the largest proportion was classified as single (34.7%), followed by married (26.6%) and separated or divorced (22.7%). Over thirteen percent (13.5%) of parents were co-habiting and just 2.3% of respondents were widowed.

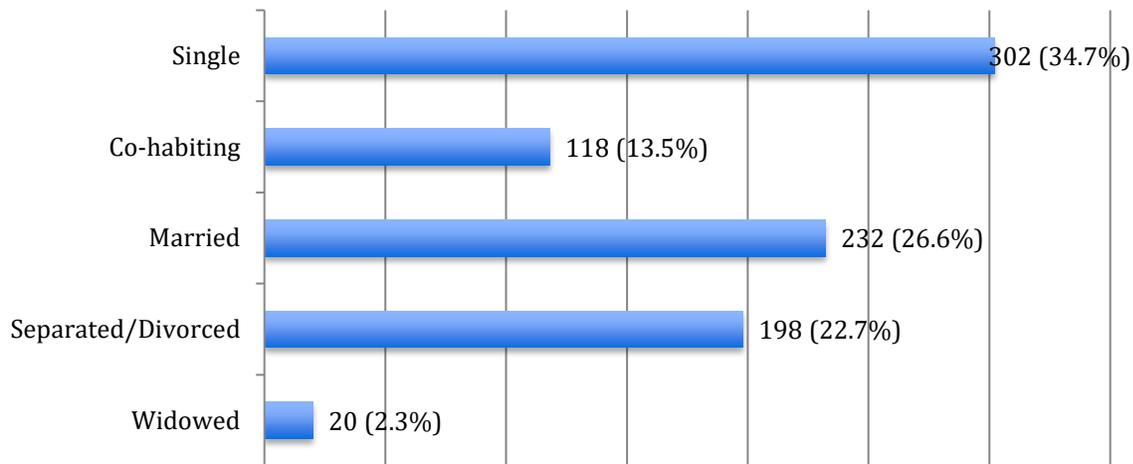


Figure 22: Parents' (guardians') marital status (N=870)

At the baseline survey adult participants were also asked to indicate their highest level of education completed. As shown in Figure 23, while some respondents reported that their education finished after primary level schooling (4.1%), others have completed postgraduate degrees (5.1%). The largest proportion of parents stated that they had received a third level certificate or diploma (34.4%).

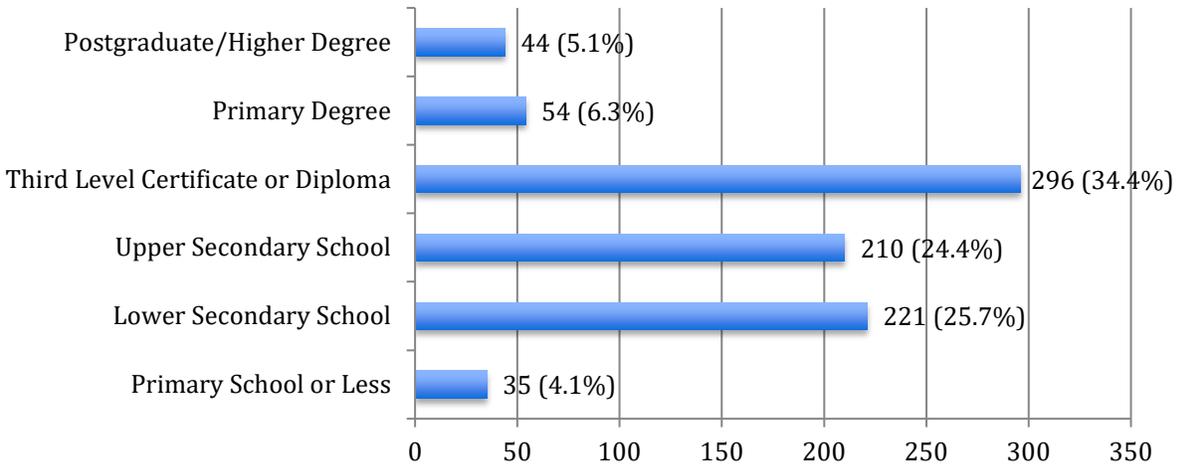


Figure 23: Parents' (guardians') level of education (N=860)

Figure 24 depicts how respondents rated their general health and shows that only a small proportion reported their health to be poor (3.2%) or only 'fair' (12.8%), while the majority of adult respondents described their health as 'good' (34.1%) or 'very good' (33.1%). Self-reported assessment of respondents' health was unavailable for 10.7% of cases.

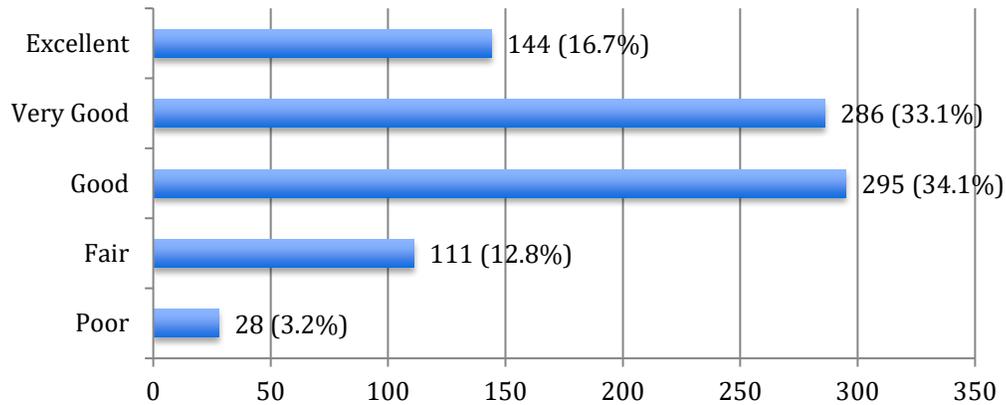


Figure 24: Parents' (guardians') physical health at present (N=864)

Household Characteristics

At the baseline data collection phase (Time 1), survey respondents were also asked to provide information on their household circumstances, including household composition, types of occupancy, main source of income, and the degree of ease or difficulty of making ends meet. Figures 25–28 below shows visual presentation of respondents' answers.

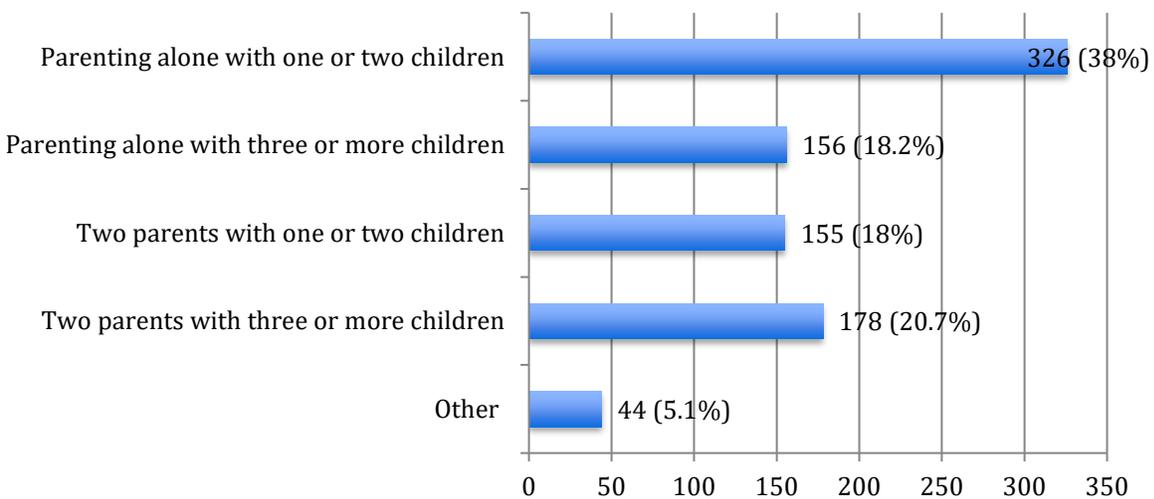


Figure 25: Household composition (N=859)

As seen in Figure 25, 56.2% of families described their household make-up as being led by a single parent and 38.7% of households were headed by two parents. For respondents who reported 'other' household compositions (5.1%), some examples included co-living and co-parenting with grandparents and other extended family members, and co-parenting a child in two separate households. Information was missing for 11.3% of cases.

The majority of families (83.2%) lived in a house, 13.3% lived in an apartment or flat and 3.5% of respondents chose 'Other' category and indicated living in B&B homeless

accommodation, their parents' or relatives' house, or shared duplex. In addition, respondents were asked "Which of the following best describes your family's occupancy of the accommodation?". Respondents' answers are visually presented in Figure 26 below and indicate that the largest proportion of families rent their accommodation from a local authority, voluntary body or private landlord (50.1%). Examples provided in the 'Other' category included staying in parents' or other relatives' houses, and homeless accommodation.

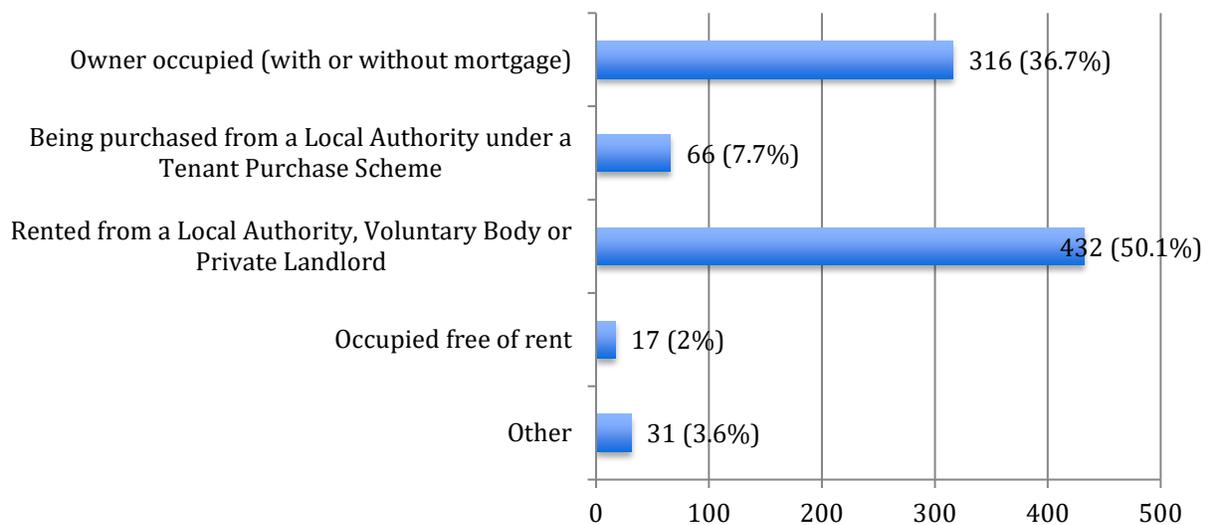


Figure 26: Occupancy of the accommodation (N=862)

Just over half of adult respondents (50.9%) indicated social welfare payments as the main source of income in the household (see Figure 27). This was followed by 44.5% of families where wages or salaries are their main source of income. 'Other' category responses included carer's allowance, Community Employment (CE) scheme and financial support received from other family members.

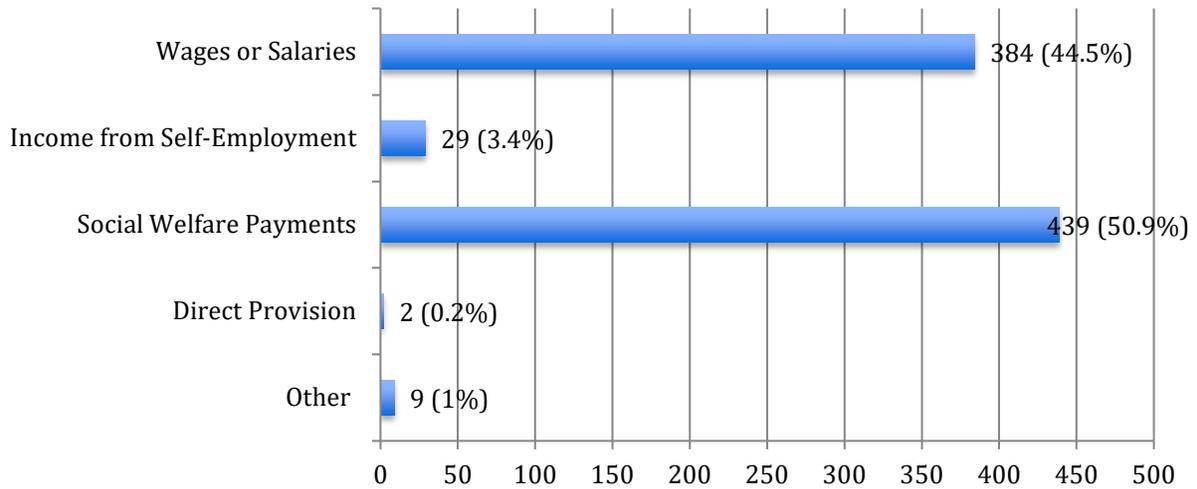


Figure 27: Main source of income in the household (N=863)

When asked with what degree of ease or difficulty the household could ‘make ends meet’ each week, the majority of respondents indicated that they experienced ‘some difficulty’ (46.5%) or ‘great difficulty’ (15.4%) in doing so (Figure 28).

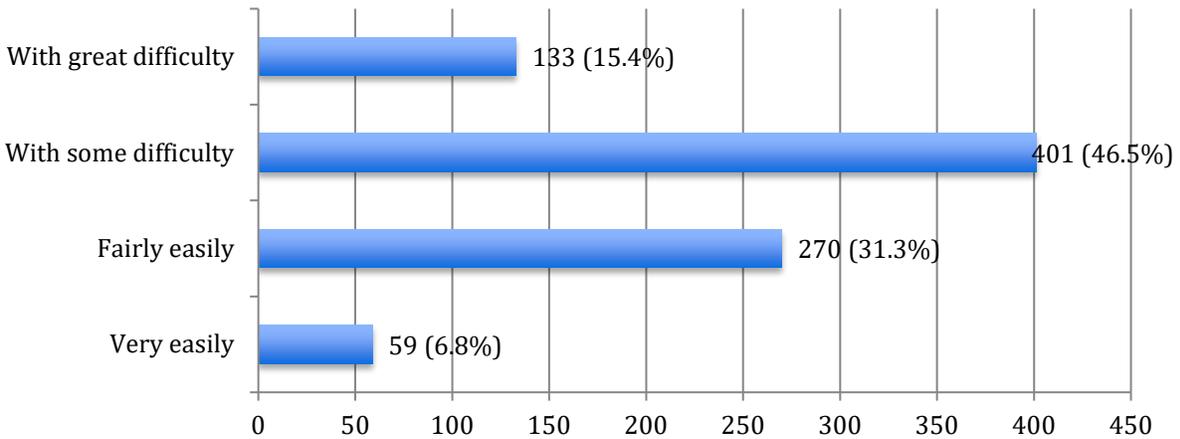


Figure 28: Degree of ease or difficulty of the household to make ends meet (N=863)

Chapter Six: What are the Outcomes of the Family Centre Evaluation?

This chapter describes the analyses that were conducted to determine if children and parents attending Family Centres experienced positive changes as assessed by using a range of outcome measures or scales tapping into child, parent and family adjustment. Scales were completed at the start (pre-intervention or 'Time 1') and again at the end of therapeutic intervention (post-intervention or 'Time 2'). As with data collected from the ECDS centres, average scale scores taken at Time 1 and Time 2 were then statistically compared using repeated measures t-tests and analyses of variance (ANOVA) and significant changes in the desired direction were taken as an indication that the intervention had a measurable effect.

The following sections provide an overview of the results of a number of paired sample t-tests conducted to compare changes in scale scores from Time 1 to Time 2. Prior to running the tests, a missing value analysis was performed for all outcome measures to establish the best way of handling data that was 'incomplete', in that some items from some scales were not answered so that total scale scores could not be computed. Importantly, it should be noted that returned surveys with entire scales unanswered were removed from the analysis.

From 0.2% to 4.2% of returned Time 1 and Time 2 surveys had scales with some missing items. For each Time 1 and Time 2 measure, the Little's chi-square statistic was performed

to determine which missing value imputation method was most suitable. The Little MCAR¹⁰ tests conducted for each scale indicated that data was *missing at random* (MAR) or *missing completely at random*¹¹(MCAR) and so missing scores were imputed employing the recommended expectation maximization (EM) algorithm (Little & Rubin, 2002).

Table 8 below presents a summary of all measures used in the parent survey at Time 1 and Time 2 along with the scale reliability scores, while Table 9 presents a summary of all measures used in the young person’s survey at Time 1 and Time 2 along with the scale reliability scores. The column ‘Matched surveys’ indicates numbers of cases that completed both Time 1 and Time 2 surveys on specific measures in the reporting period December 2015 to December 2017.

Table 8: Measures used in Time 1 and Time 2 parent surveys (N and reliability α)

Scale	Time 1	Time 2	Matched Surveys
SDQ			
<i>Emotional Problems</i>	897 ($\alpha = .69$)	497 ($\alpha = .72$)	439
<i>Conduct Problems</i>	897 ($\alpha = .72$)	497 ($\alpha = .75$)	439
<i>Hyperactivity</i>	897 ($\alpha = .75$)	497 ($\alpha = .78$)	439
<i>Peer Problems</i>	897 ($\alpha = .56$)	497 ($\alpha = .66$)	439
<i>Prosocial Behavior</i>	897 ($\alpha = .73$)	497 ($\alpha = .73$)	439
<i>Total SDQ</i>	897 ($\alpha = .68$)	497 ($\alpha = .75$)	439

¹⁰ MCAR stands for ‘Missing Completely At Random’.

¹¹ The Little MCAR¹¹ test obtained for the SDQ Time 1 data resulted in a chi-square = 952.16 ($df = 830, p < 0.05$) and SDQ Time 2 data in a chi-square = 586.68 ($df = 511, p < 0.05$) which indicated that the data was missing at random (MAR). For the Child-Parent Relationship scale Time 1 and Time 2 data, a chi-square = 268.42 ($df = 235, p = 0.07$) and a chi-square = 171.86 ($df = 136, p = 0.06$), respectively, suggesting that data was missing completely at random. In addition, the data was missing completely at random for MHI-5 at Time 1 [chi-square = 14.87 ($df = 8, p = 0.06$)] and Time 2 (chi-square = 14.99 ($df = 8, p = 0.06$)).

MHI-5	896 ($\alpha = .83$)	499 ($\alpha = .83$)	440
CPRS			
<i>Closeness</i>	896 ($\alpha = .75$)	498 ($\alpha = .76$)	438
<i>Conflict</i>	896 ($\alpha = .86$)	498 ($\alpha = .85$)	438

Table 9: Measures used in Time 1 and Time 2 young person's surveys (N and reliability α)

Scale	Time 1	Time 2	Matched Surveys
SDQ			
<i>Emotional Problems</i>	280 ($\alpha = .69$)	154 ($\alpha = .73$)	114
<i>Conduct Problems</i>	280 ($\alpha = .66$)	154 ($\alpha = .63$)	114
<i>Hyperactivity</i>	280 ($\alpha = .65$)	154 ($\alpha = .75$)	114
<i>Peer Problems</i>	280 ($\alpha = .59$)	154 ($\alpha = .50$)	114
<i>Prosocial Behavior</i>	280 ($\alpha = .56$)	154 ($\alpha = .62$)	114
<i>Total SDQ</i>	280 ($\alpha = .77$)	154 ($\alpha = .83$)	114
PSI-Mother			
<i>Responsiveness</i>	245 ($\alpha = .76$)	140 ($\alpha = .76$)	93
<i>Control</i>	245 ($\alpha = .63$)	140 ($\alpha = .61$)	93
PSI-Father			
<i>Responsiveness</i>	209 ($\alpha = .80$)	111 ($\alpha = .87$)	69
<i>Control</i>	209 ($\alpha = .71$)	111 ($\alpha = .75$)	69

Children's Emotional and Behavioural Strengths or Difficulties

The Strengths and Difficulties Questionnaire (SDQ) is used to identify behavioral and emotional problems in children and adolescents, producing scores for five subscales: *Emotional Problems*, *Conduct Problems*, *Hyperactivity*, *Peer Problems* and *Prosocial Behavior*.

Scores on the SDQ subscales can range from 0-10 with higher scores indicating more difficulties, except the *Prosocial Behavior* subscale, where higher scores indicate better adjustment. *Total Difficulties* scores can range from 0 – 40 and again higher scores indicate more difficulties. In the Family Centres, the SDQ surveys were completed by parents and children aged over nine years.

- **Parent-Reported SDQ Scores**

Table 10 below lists parent-reported average scores for the SDQ subscales and the computation of *Total Difficulties* for Time 1 and Time 2, alongside the four-band categorization of these average scores as “Close to average”, “Slightly raised (/Slightly lowered)”, “High (/Low)” and “Very high (/Very low)”.

Table 10: SDQ sub-scales: Time 1 and Time 2 data (parent report)

Measure	Average Score	Time 1	Average Score	Time 2
	Time 1	Category	Time 2	Category
Emotionality	5.2	High	3.7	Slightly raised
Conduct	3.3	Slightly raised	2.3	Close to average
Hyperactivity	5.4	Slightly raised	4.7	Close to average
Peer Problems	2.9	Slightly raised	2.4	Close to average
Total Difficulties	16.9	High	13.1	Close to average
*Prosocial	7.9	Close to average	8.2	Close to average

Figure 29 below shows that average scores on all ‘problem’ measures significantly decreased from Time 1 to Time 2, while average score on the measure of *Prosocial Behavior*

increased. All changes in average scores are statistically significant suggesting significant improvements in the overall SDQ score and all separate subscale scores:

- The average score of SDQ Emotionality scale decreased from Time 1 ($M=5.2$, $SD=2.69$) to Time 2 ($M=3.7$, $SD=2.49$) ($t(438)=11.85$, $p<.01$, effect size=0.6);
- SDQ Conduct decreased from Time 1 ($M=3.3$, $SD=2.44$) to Time 2 ($M=2.3$, $SD=2.15$) ($t(438)=10.36$, $p<.01$, effect size=0.4);
- SDQ Hyperactivity decreased significantly from Time 1 ($M=5.4$, $SD=3.00$) to Time 2 ($M=4.7$, $SD=2.92$) ($t(438)=6.86$, $p<.01$, effect size=0.2);
- SDQ Peer problems decreased from Time 1 ($M=2.9$, $SD=2.25$) to Time 2 ($M=2.4$, $SD=2.15$) ($t(438)=5.88$, $p<.01$, effect size=0.2);
- SDQ Total Difficulties decreased from Time 1 ($M=16.9$, $SD=7.03$) to Time 2 ($M=13.1$, $SD=7.15$) ($t(438)=13.20$, $p<.01$, effect size=0.5);
- And SDQ Prosocial Behaviour increased from Time 1 ($M=7.9$, $SD=2.09$) to Time 2 ($M=8.2$, $SD=1.95$) ($t(438)=-3.10$, $p<.05$, effect size=0.2)

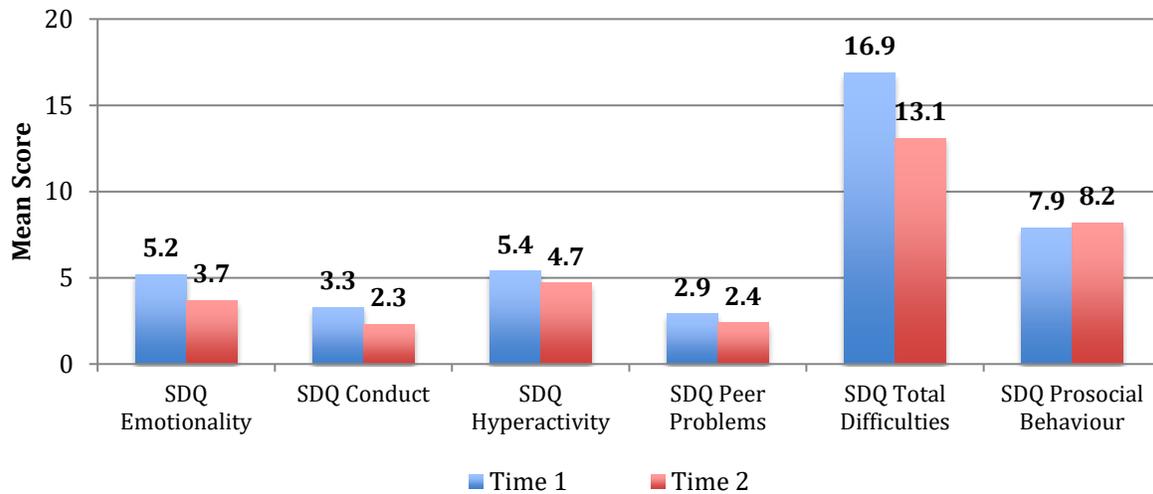


Figure 29: Changes in the average scores of SDQ subscales from Time 1 to Time 2 (parent-report)

Table 11 provides details of average scores for children all together and then broken down by sex. Significant changes were observed on all SDQ sub-scales in paired sample t-test analyses performed separately for boys and girls, except for Prosocial Behaviour score, which did not increase from Time 1 to Time 2 for girls.

Table 11: Changes in the average scores of SDQ subscales from Time 1 to Time 2 for the sample as a whole and then for boys and girls separately (parent reported).

	All Children		Boys		Girls	
	Time 1	Time 2	Time 1	Time 2	Time 1	Time 2
<i>Emotionality</i>	5.2	3.7*	4.9	3.6*	5.4	3.9*
<i>Conduct</i>	3.3	2.3*	3.4	2.5*	3.1	2.1*
<i>Hyperactivity</i>	5.4	4.7*	6.0	5.2*	4.8	4.1*
<i>Peer Problems</i>	2.9	2.4*	3.0	2.5*	2.9	2.3*
<i>Prosocial Behaviour</i>	7.9	8.2*	7.7	8.0*	8.4	8.5
<i>Total Difficulties</i>	16.9	13.1*	17.4	13.8*	16.2	12.4*

* Statistically significant improvement from Time 1 to Time 2 ($p < .05$)

Repeated measures ANOVA test was performed to examine differences in parent-reported Total Difficulties scores between boys and girls. Test results were significant ($F(1, 434) = 4.39, p < .05$) indicating measurable differences between boys and girls in their Total Difficulties scores over time. A set of independent sample t-tests was then conducted to examine these differences at Time 1 and Time 2. Results revealed that, at Time 1, girls in the Family Centres scored significantly higher on SDQ Emotionality scale ($t(890) = -2.56, p < .05$, effect size = 0.2), and SDQ Prosocial Behaviour ($t(890) = -5.42, p < .01$, effect size = 0.4), and significantly lower on SDQ Conduct ($t(890) = 3.22, p < .01$, effect size = 0.2), SDQ Hyperactivity ($t(890) = 7.06, p < .01$, effect size = 0.5), and the Total Difficulties scale ($t(890) = 3.62, p < .01$, effect size = 0.2). There was no statistically significant difference between boys and girls in their Peer Problem scores. At Time 2, significant

differences remained between boys and girls in their SDQ Conduct scores ($t(435)=2.04$, $p<.05$, effect size=0.2), SDQ Hyperactivity ($t(435)=3.88$, $p<.01$, effect size=0.4), and SDQ Prosocial Behaviour scores ($t(435)=-2.78$, $p<.01$, effect size=0.3). Differences in SDQ Emotionality scores were no longer significant ($t(435)=-1.31$, $p>.05$), and the Total Difficulties scale was marginally non-significant ($t(435)=1.94$, $p=.05$, effect size=0.1).

Figure 30 below provides details of the changes in SDQ average scores for children who, at Time 1, scored particularly high on SDQ scales and thus were characterized as having high or very high levels of emotional and behavioural problems. As seen in Figure below, the average scores on all 'problem' measures significantly decreased from Time 1 to Time 2, while average score on the measure of *Prosocial Behavior* increased. All these changes were statistically significant:

- The average score of SDQ Emotionality scale decreased from Time 1 ($M=6.4$, $SD=2.40$) to Time 2 ($M=4.6$, $SD=2.48$) ($t(219)=10.07$, $p<.01$, effect size=0.7);
- SDQ Conduct decreased from Time 1 ($M=4.7$, $SD=2.32$) to Time 2 ($M=3.2$, $SD=2.35$) ($t(219)=11.02$, $p<.01$, effect size=0.6);
- SDQ Hyperactivity decreased significantly from Time 1 ($M=7.4$, $SD=2.24$) to Time 2 ($M=5.8$, $SD=2.85$) ($t(219)=9.62$, $p<.01$, effect size=0.6);
- SDQ Peer problems decreased from Time 1 ($M=4.2$, $SD=2.18$) to Time 2 ($M=3.1$, $SD=2.27$) ($t(219)=6.93$, $p<.01$, effect size=0.5);
- SDQ Total Difficulties decreased from Time 1 ($M=22.6$, $SD=4.34$) to Time 2

($M=16.7$, $SD=6.96$) ($t(219)=14.55$, $p<.01$, effect size=1.02);

- And SDQ Prosocial Behaviour increased from Time 1 ($M=7.2$, $SD=2.28$) to Time 2 ($M=7.8$, $SD=2.14$) ($t(438)=-4.21$, $p<.01$, effect size=0.3).

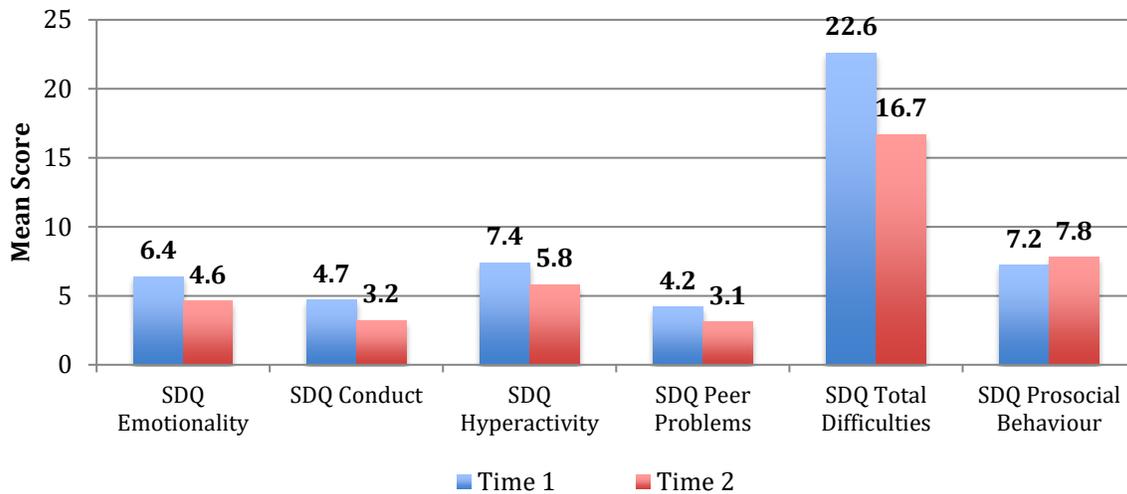


Figure 30: Changes in the average scores of SDQ subscales from Time 1 to Time 2 for the sample of children with high or very high emotional and behavioural problems (parent report)

- **Child-reported SDQ Scores**

Table 12 lists average scores for the self-completed SDQ subscales and the computation of *Total Difficulties* scores for Time 1 and Time 2, alongside the four-band categorization of these average scores as “Close to average”, “Slightly raised (/Slightly lowered)”, “High (/Low)” and “Very high (/Very low)”.

Table 12: SDQ sub-scales: Time 1 and Time 2 data (child report)

Measure	Average Score Time 1	Time 1 Category	Average Score Time 2	Time 2 Category
Emotionality	4.5	Slightly raised	3.3	Close to average
Conduct	2.8	Close to average	1.9	Close to average
Hyperactivity	5.0	Close to average	3.9	Close to average
Peer Problems	2.3	Slightly raised	1.8	Close to average
Total Difficulties	14.5	Slightly raised	10.9	Close to average
*Prosocial Behaviour	8.3	Close to average	8.7	Close to average

Figure 31 below shows that average scores on all ‘problem’ measures significantly decreased from Time 1 to Time 2, while average score on the measure of *Prosocial Behavior* increased indicating considerable improvements in self-reported adjustment:

- The average score of SDQ Emotionality decreased from Time 1 ($M=4.5$, $SD=2.59$) to Time 2 ($M=3.3$, $SD=2.34$) ($t(113)=6.20$, $p<.01$, effect size=0.5);
- SDQ Conduct decreased from Time 1 ($M=2.8$, $SD=2.06$) to Time 2 ($M=1.9$, $SD=1.64$) ($t(113)=5.85$, $p<.01$, effect size=0.5);
- SDQ Hyperactivity decreased significantly from Time 1 ($M=5.0$, $SD=2.42$) to Time 2 ($M=3.9$, $SD=2.65$) ($t(113)=5.35$, $p<.01$, effect size=0.4);
- SDQ Peer problems decreased from Time 1 ($M=2.3$, $SD=1.96$) to Time 2 ($M=1.8$, $SD=1.74$) ($t(113)=2.39$, $p<.05$, effect size=0.3);

- SDQ Total Difficulties decreased from Time 1 ($M=14.5$, $SD=6.11$) to Time 2 ($M=10.9$, $SD=6.08$) ($t(113)=7.33$, $p<.01$, effect size=0.6);
- And SDQ Prosocial Behaviour increased from Time 1 ($M=8.3$, $SD=1.69$) to Time 2 ($M=8.7$, $SD=1.53$) ($t(113)=-2.71$, $p<.01$, effect size=0.2).

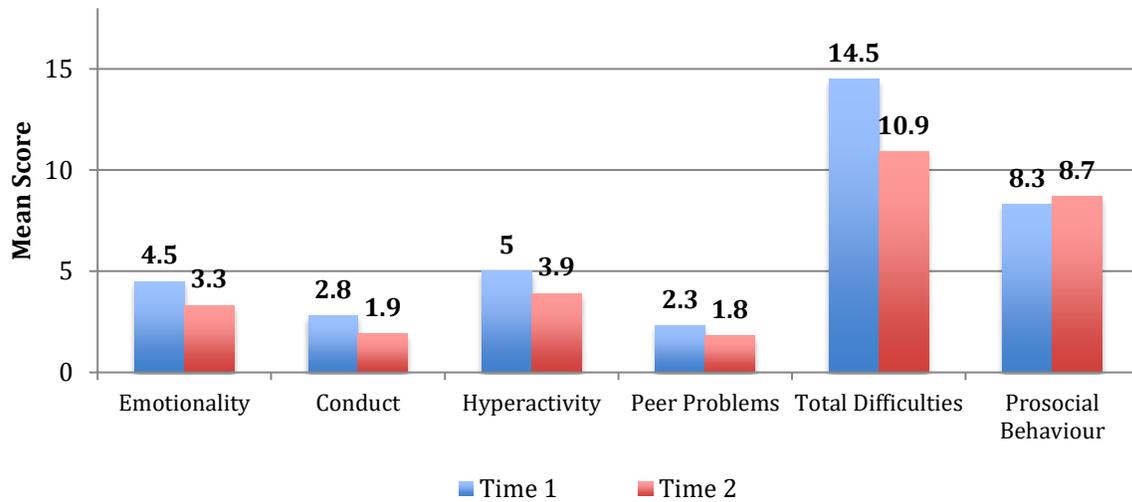


Figure 31: Changes in the average scores of self-reported SDQ subscales from Time 1 to Time 2

Table 13 below provides details of average scores for children all together and then broken down by sex. Significant positive changes were observed on all SDQ sub-scales in paired sample t-test analyses performed separately for boys and girls, except for the *Peer Problems* score, which did not change significantly for boys, and the *Prosocial Behaviour* score, which did not change significantly for girls.

Table 13: Changes in self-reported average scores of SDQ subscales from Time 1 to Time 2 for the sample as a whole and then for boys and girls separately.

	All Children		Boys		Girls	
	Time 1	Time 2	Time 1	Time 2	Time 1	Time 2
<i>Emotionality</i>	4.5	3.3*	3.7	2.7*	5.3	3.9*
<i>Conduct</i>	2.8	1.9*	3.0	2.1*	2.6	1.6*
<i>Hyperactivity</i>	5.0	3.9*	5.3	4.4*	4.7	3.4*
<i>Peer Problems</i>	2.3	1.8*	2.0	1.7	2.5	1.9*
<i>Prosocial Behaviour</i>	8.3	8.7*	7.9	8.5*	8.7	9.0
<i>Total Difficulties</i>	14.5	10.9*	13.9	10.9*	15.1	10.9*

* Statistically significant improvement from Time 1 to Time 2 ($p < .05$)

Repeated measures ANOVA test was performed to examine differences in the Total Difficulties scores between boys and girls. Test results were not significant ($F(1, 111) = 0.29, p > .05$) indicating no differences between boys and girls in their Total Difficulties scores over time. A set of independent sample t-tests was then conducted to examine differences between boys and girls in their SDQ sub-scale scores at Time 1 and Time 2. Results revealed that, at Time 1, girls in the Family Centres scored significantly higher on self-reported *Emotionality* scale ($t(275) = -4.20, p < .01, \text{effect size} = 0.5$) and *Prosocial Behaviour* scores ($t(275) = -4.23, p < .01, \text{effect size} = 0.5$), and significantly lower on *Conduct* ($t(275) = 3.52, p < .01, \text{effect size} = 0.4$) and *Hyperactivity* ($t(275) = 2.30, p < .05, \text{effect size} = 0.3$). There were no statistically significant difference between boys and girls in their *Peer Problem* scores ($t(275) = -3.62, p > .05$) and Total Difficulties scores ($t(275) = 0.19, p > .05$). At

Time 2, significant differences remained between boys and girls in their self-reported Emotionality ($t(130)=-2.57, p<.05$, effect size=0.5), Conduct scores ($t(130)=2.1, p<.05$, effect size=0.4), and Prosocial Behaviour scores ($t(130)=-2.03, p<.05$, effect size=0.4). Differences in self-reported Hyperactivity scores were no longer significant ($t(130)=1.50, p>.05$).

Figure 32 below provides details of the changes in SDQ average scores for children and young people who, at Time 1, were characterized as having high or very high levels of self-reported emotional and behavioural problems. As seen, the average scores on all 'problem' measures significantly decreased from Time 1 to Time 2, while average score on the measure of Prosocial Behavior did not change. Effect sizes for statistically significant findings are considerable, indicating change close to or above one standard deviation:

- The average score of SDQ Emotionality scale decreased from Time 1 ($M=6.5, SD=2.17$) to Time 2 ($M=4.6, SD=2.54$) ($t(36)=4.30, p<.01$, effect size=0.8);
- SDQ Conduct decreased from Time 1 ($M=4.2, SD=2.05$) to Time 2 ($M=2.5, SD=1.82$) ($t(36)=6.16, p<.01$, effect size=0.9);
- SDQ Hyperactivity decreased significantly from Time 1 ($M=7.0, SD=1.71$) to Time 2 ($M=4.8, SD=2.80$) ($t(36)=5.31, p<.01$, effect size=0.9);
- SDQ Peer problems decreased from Time 1 ($M=3.9, SD=1.89$) to Time 2 ($M=2.9, SD=1.82$) ($t(36)=2.63, p<.05$, effect size=0.5);
- SDQ Total Difficulties decreased from Time 1 ($M=21.6, SD=3.39$) to Time 2 ($M=14.8, SD=6.14$) ($t(36)=6.55, p<.01$, effect size=1.4);

- And SDQ Prosocial Behaviour increased from Time 1 ($M=7.8$, $SD=2.05$) to Time 2 ($M=8.2$, $SD=1.89$) ($t(36)=-1.22$, $p>.05$).

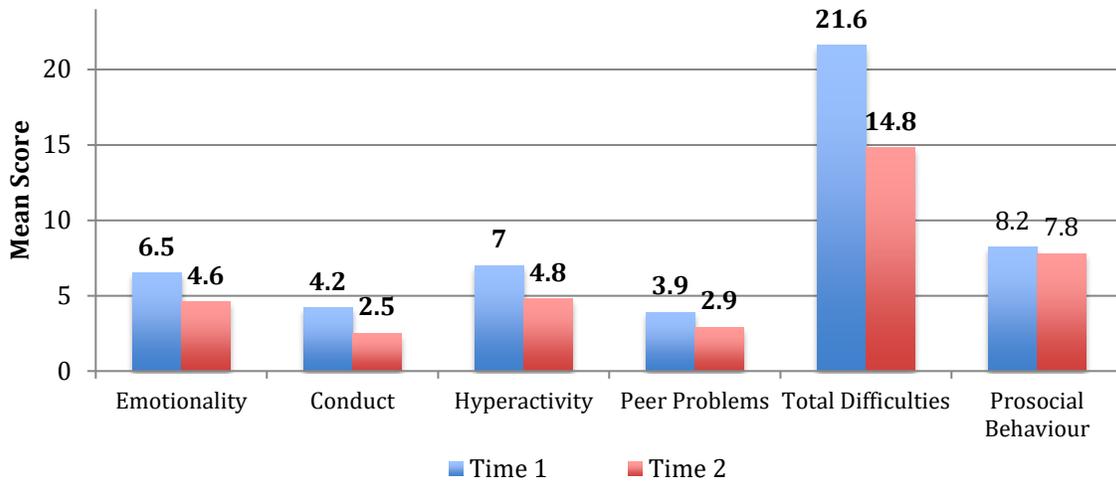


Figure 32: Changes in the average scores of self-reported SDQ subscales from Time 1 to Time 2 for the sample of children and adolescents with high or very high emotional and behavioural problems

Parents' Mental Health

Results of a paired-sample t-test showed that, in the overall sample of parents (guardians) attending the Family Centres, there was a statistically significant change in the MHI-5 scores between Time 1 ($M=63.7$, $SD=21.57$) and Time 2 ($M=72.5$, $SD=18.17$) suggesting a significant improvement in parents' mental wellbeing over time ($t(439)=-9.10$, $p<.01$, effect size=0.4). Additional analysis was performed to test the difference in MHI-5 scores between Time 1 and Time 2 among those parents (guardians) who scored low on MHI-5 at Time 1 (i.e. below 52 on the scale from 0 to 100 - the recommended cut-off point to screen for depressive disorders - when the mean score for the whole sample at Time 1

was 63.7). Results indicate that there was also a considerable and statistically significant improvement in parents' mental wellbeing among this group of carers from Time 1 (M=32.8, SD=10.59) and Time 2 (M=59.8, SD=20.69) ($t(108)=-13.71, p<.01$, effect size=1.64). Visual representation of these changes is seen in Figure 33.

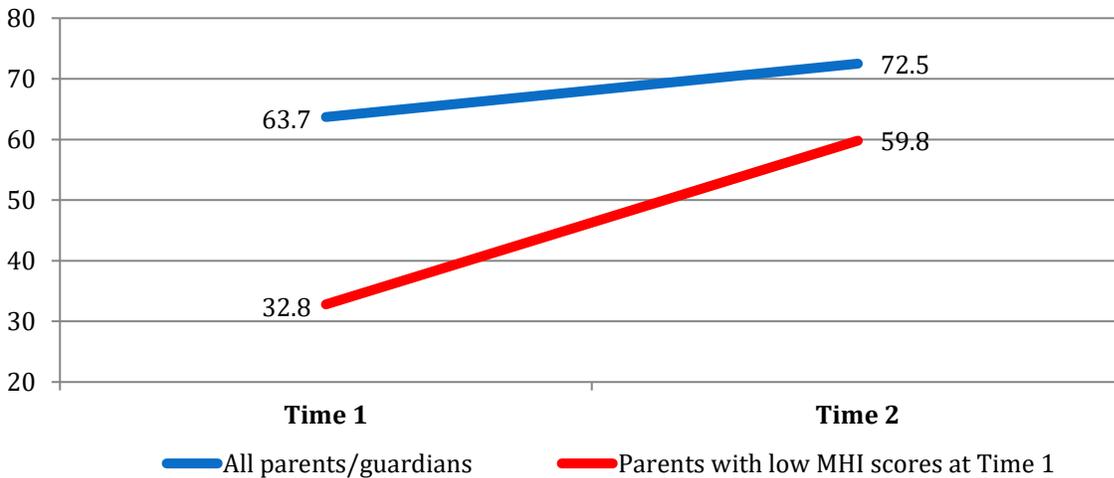


Figure 33: Changes in the average scores of MHI-5 scale from Time 1 to Time 2 among all parents (guardians) and also those with low MHI-5 scores at Time 1

In addition, the results of a repeated measures ANOVA test showed that there was a statistically significant difference between single parent household and two-parent household in their MHI scores over time ($F(1, 404) = 6.22, p<.05$). A set of independent sample t-tests was then conducted to examine these differences at both time points. Results revealed that, at Time 1, the average scores of MHI-5 were significantly higher among parents from two-parent households than from single-parent household ($t(803)=-2.90, p<.01$, effect size=0.2). Interestingly, this difference was no longer significant at Time 2 ($t(406)=-1.72, p>.05$). Additionally, results of paired sample t-tests showed that, for

single parents, the average scores of mental wellbeing increased significantly from Time 1 ($M=60.0$, $SD=23.67$) to Time 2 ($M=71.0$, $SD=18.69$) ($t(218)=-7.46$, $p<.01$, effect size=0.5). Statistically significant improvements in parent mental wellbeing were also found in two-parent households, where MHI-5 scores increased from Time 1 ($M=65.4$, $SD=18.72$) to Time 2 ($M=74.1$, $SD=17.92$) ($t(218)=-6.20$, $p<.01$, effect size=0.5). Visual presentations of these changes are seen in Figure 34.

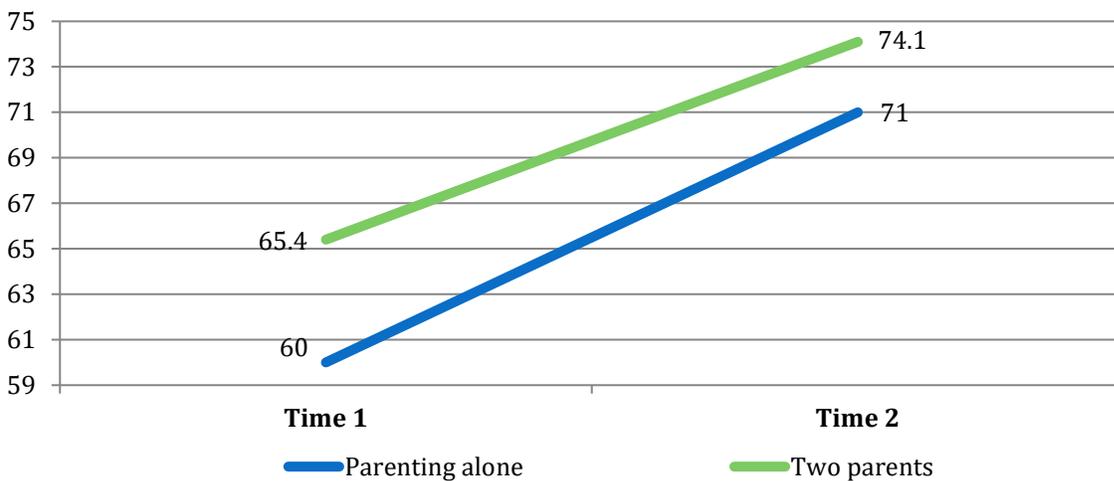


Figure 34: Changes in the average scores of MHI-5 scale from Time 1 to Time 2 among single-parent and two-parent households

Child-Parent Relationship

In the present study the Child-Parent Relationship Scale (CPRS) assessed parents' perceptions of their relationships with their children. The Parenting Style Inventory II (PSI-II) elicits the views on children aged nine years or older on their relationship with their parents.

- **Parent-reported Relationship Quality**

The 15-item version of the CPRS measure was used in the Family Centre surveys with the *Conflict* and *Closeness* sub-scales representing two distinct domains of parent-child relationships. The 7-item *Closeness* subscale assesses the extent to which a parent (guardian) feels that the relationship with a child is characterised by warmth, affection, and open communication. Scores can range from 7-35 with higher scores indicating closer relationships. The 8-item *Conflict* subscale measures the degree to which a parent (guardian) feels that his or her relationship with a particular child is characterized by negativity. Scores on the CPRS *Conflict* scale can range from 8-40 with higher scores indicating more tense or conflictual relationships.

Results of paired-sample t-tests for the sample as a whole showed that there was a statistically significant difference in the CPRS *Closeness* scores between Time 1 (M=29.8, SD=4.92) and Time 2 (M=31.3, SD=3.97) as reported by parents attending Family Centres ($t(437)=-7.44, p<.01, \text{effect size}=0.3$). Similarly, statistically significant change in the CPRS *Conflict* scores were found between Time 1 (M=22.7, SD=8.90) and Time 2 (M=19.7, SD=8.21) ($t(437)=9.08, p<.01, \text{effect size}=0.5$). Visual representation of the changes in *Closeness* and *Conflict* scores across time is seen in Figure 35. These results indicate significant improvements in levels of child-parent closeness and conflict following their involvement with Family Centres.

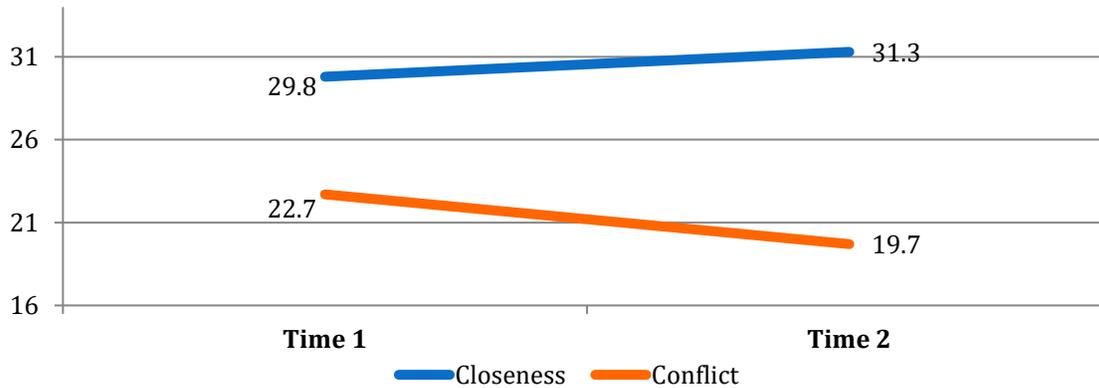


Figure 35: Changes in the average scores of CPRS Closeness and Conflict scales from Time 1 to Time 2

Results of repeated measures ANOVA tests showed that there were no significant differences for girls and boys in their CPRS *Closeness* ($F(1, 433)=0.45, p>.05$) and CPRS *Conflict* scores ($F(1, 433)=0.09, p>.05$) from Time 1 and Time 2. Additional independent sample t-tests for Time 1 and Time 2 showed that there were no significant differences in the CPRS scores between boys and girls at either time point.

- **Child-reported Relationship Quality**

The Parenting Style Inventory (PSI-II) instrument assesses children’s and adolescents’ perceptions of their parents’ *responsiveness*, or the extent to which they show affective warmth, acceptance, and involvement, and *control*, or how regulation, maturity demands and supervision are key features in their parenting. In the Family Centre survey, young people were asked to complete PSI-II questions for their mother and father, where applicable, and results presented below discuss results for mothers and fathers, separately.

Scores on the 5-item subscales of *Responsiveness* and *Control* can range from 5-25 with higher scores on the first indicating parental acceptance and warmth, while higher scores on the second indicating a more demanding parenting style. These subscales represent two distinct domains of parent-child relationships, as evidenced by a relatively low correlation between the scales (for PSI-Mother $r = .16$, and for PSI-Father $r = .21$), and both are associated with a range of positive outcomes including self-esteem, intrinsic motivation and school involvement (Darling & Toyokawa, 1997).

A set of repeated-measures t-tests showed significant difference between PSI *Responsiveness* scores for Mother at Time 1 (M=20.2, SD=4.10) and Time 2 (M=21.2, SD=3.72) ($t(92)=-2.40, p<.05$, effect size=0.3) but no significant difference was found in PSI *Control* scores for Mother between Time 1 (M=19.0, SD=3.38) and Time 2 (M=19.5, SD=3.08) ($t(92)=-1.61, p>.05$). Figure 36 below depicts these changes in PSI-II *Responsiveness* and *Control* scores between Time 1 and Time 2.

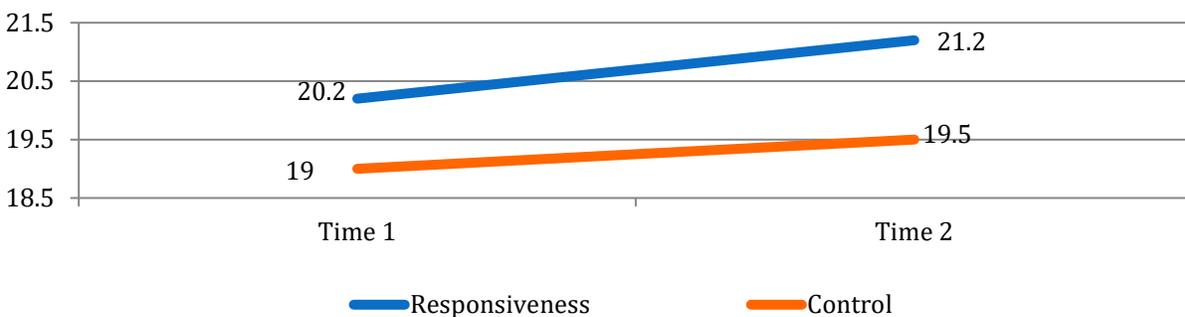


Figure 36: Changes in the average scores of PSI-Mother *Responsiveness* and *Control* scales from Time 1 to Time 2

Similar results were found regarding changes in PSI subscale scores for Fathers. That is, a repeated measures t-test found a significant difference between *Responsiveness* scores for Fathers at Time 1 (M=17.6, SD=4.60) and Time 2 (M=18.6, SD=5.07) ($t(68)=-2.24, p<.05$, effect size=0.2) but no change in *Control* scores from Time 1 (M=17.7, SD=4.00) to Time 2 (M=17.7, SD=4.15) ($t(68)=0.04, p>.05$). Visual representation of these findings is seen in Figure 37.

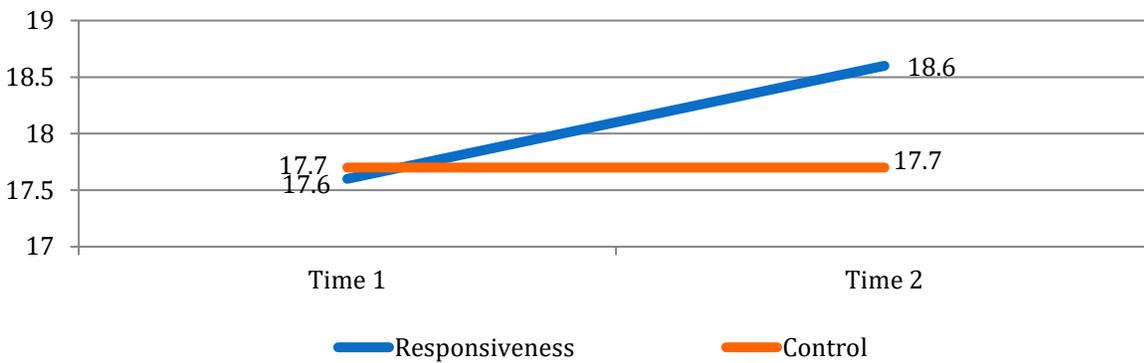


Figure 37: Changes in the average scores of PSI-Father *Responsiveness* and *Control* scales from Time 1 to Time 2

Additional tests were performed to examine changes in the PSI-II subscales for boys and girls. Results of repeated measures ANOVA tests showed that there were no significant differences between girls and boys in their PSI-II subscale scores with regard to their mothers or fathers, over time (For PSI-Mother, $F(1,90)=0.08, p>.05$, and for PSI-Father, $F(1,67)=1.07, p>.05$). Independent sample t-tests for Time 1 and Time 2 showed that there were no significant differences in the PSI scores between boys and girls at either time point.

Children's Coping

The Kidcope is a self-report, multidimensional checklist designed to assess cognitive and behavioral coping strategies among children and adolescents. There are two versions of the Kidcope scale: one for younger children aged 7-12 years and one for adolescents aged 13-18 years. Both are widely used in assessing the use and effectiveness of ten cognitive and behavioral coping strategies, namely distraction, social withdrawal, wishful thinking, resignation, self-criticism, blaming others, problem-solving, emotional regulation, cognitive restructuring, and social support. Based on these coping strategies, three major coping patterns are generated:

- *Active Coping Strategies* (e.g. problem solving, emotional regulation, cognitive restructuring, and social support);
- *Negative Coping Strategies* (e.g. self-criticism and blaming others)
- *Avoidant Coping Strategies* (e.g. distraction, social withdrawal, wishful thinking, and resignation)

Each version of the Kidcope screening tool is divided into two parts. In the first part, a child or adolescent describes and rates a problem situation that they generate themselves or are given. This part gives a sense of how upsetting they found the problem (*Problem Distress*). In the second part, the child or adolescent must rate a series of coping strategies,

indicating if they use them (*Use Frequency*)¹². The following sections review the *Problem Distress* scores and the frequency of use of the three sets of coping strategies among children (7-12) and adolescents (13-18) who completed the Kidcope checklist over time.

- **Kidcope results for children (7-12 year old)**

A total of 186 children completed the Kidcope checklist at Time 1 and 93 children completed the Kidcope scale questions at Time 2. The first part of the measure asked children how they respond emotionally to a particular problematic experience with three questions (e.g. “Did it make you feel sad or unhappy?”). Answer options ranged from “not at all” (0) to “very much” (4). The scores for all three questions were summed with the higher score indicating that a child is highly emotionally reactive.

The following Figures 38-39 show the percentages and the average scores on Problem Distress at Time 1 and Time 2 for children aged 7-12 years who completed both Time 1 and Time 2 Kidcope surveys (N=71). While the percentage of children who scored low on Problem Distress increased from 29.6% at Time 1 to 40.8% at Time 2 and the percentage children who scored high on the scale decreased from Time 1 (23.9%) to Time 2 (21.1%) (see Figure 38), these changes were not statistically significant. That is, the results of a repeated measures t-test revealed that while the average score of Problem Distress

¹² The Kidcope also assesses respondents’ views on how much the various coping strategies helped them. However, due to high percentage of missing data on efficacy questions (20-60%), analysis was not conducted on Strategy Efficacy.

decreased from Time 1 (M=6.4, SD=3.16) to Time 2 (M=5.7, SD=3.04) (see Figure 39 below), this change was not statistically significant ($t(70)=1.75, p>.05$). Similarly, while there was a promising trend in decreasing Problem Distress scores from Time 1 (M=6.8, SD=3.45) and Time 2 (M=5.8, SD=3.11) in the sample of children with high or very high emotional and behavioural problems (i.e. SDQ Total Difficulties score >16), this change was not statistically significant ($t(31)=1.47, p>.05$). In addition, a repeated measures ANOVA test showed that there were no significant differences between girls and boys in their Problem Distress scale over time ($F(1, 62)=.03, p>.05$). However, it should be noted that the very small sample sizes here make it difficult to detect a significant difference, even if one should exist, as statistical power is compromised.

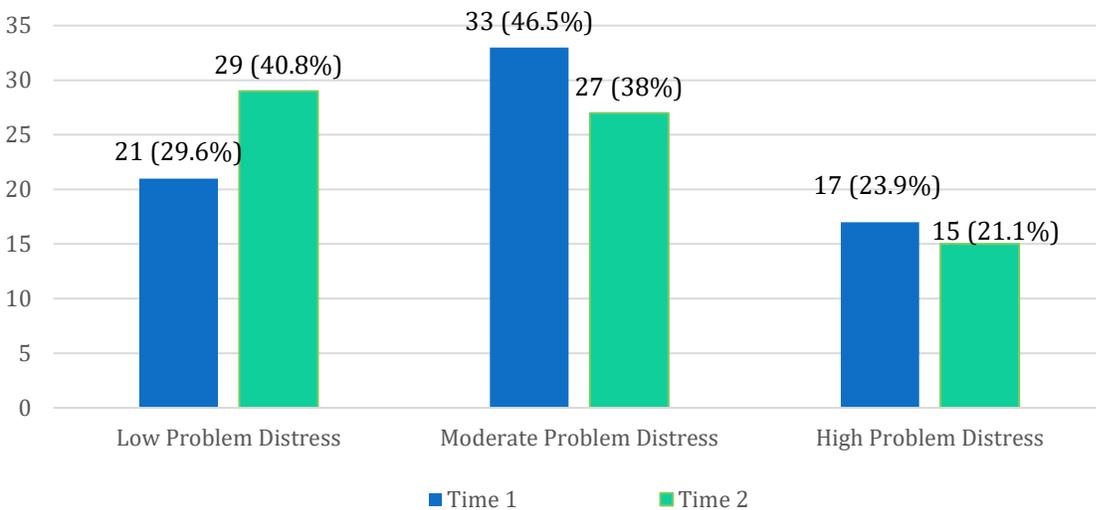


Figure 38: Emotional response to a particular problem experience among children who completed Time 1 and Time 2 surveys (N=71)

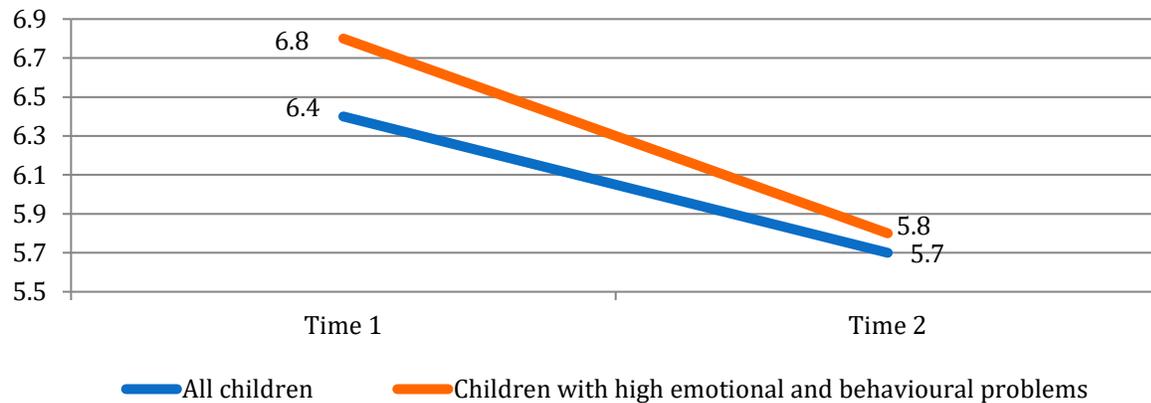


Figure 39: Changes in the average scores of Problem Distress from Time 1 to Time 2

Based on children’s answers to Kidcope scale questions about their typical reactions and coping behaviours, three overarching categories of coping strategies were calculated (i.e. Active Coping Strategies, Negative Coping Strategies, and Avoidant Coping Strategies). *Active Coping Strategies* category represented four individual coping strategies namely, problem solving, emotional regulation, cognitive restructuring, and social support. Response scores ranged from 0 to 6 with the higher scores indicating more frequent use of active coping strategies. *Negative Coping Strategies* category was calculated by summing self- criticism and blaming others strategies, with summed response scores ranging from 0 (infrequent use) to 2 (frequent use). *Avoidant Coping Strategies* represented the use of distraction, social withdrawal, wishful thinking, and resignation coping strategies. Summed response scores ranged from 0-7 with higher scores indicating more frequent use of avoidant coping strategies.

Results showed no significant changes in the average scores of each coping strategy that occurred over time for those children who completed both Time 1 and Time 2 Kidcope

questions (N=71). That is, the average scores in *Active Coping Strategies* did not change significantly from Time 1 (M=4.0, SD=1.39) to Time 2 (M=3.9, SD=1.4) ($t(71)=0.84, p>.05$). Average scores in *Negative Coping Strategies* also remained the same over time (at Time 1, M=0.7, SD=0.65 and at Time 2, M=0.7, SD=0.64) ($t(71)=-.28, p>.05$). The mean score of *Avoidant Coping Strategies* also did not change from Time 1 (M=4.2, SD=1.4) to Time 2 (M=4.1, SD=1.6) ($t(71)=0.59, p>.05$).

- **Kidcope results for adolescents (13-18 year old)**

A total of 127 adolescents completed the Kidcope checklist at Time 1 and 70 adolescents completed the scale questions at Time 2. The first part of the measure asked children how they respond emotionally to a particular adverse experience with three questions (e.g. “Did it make you feel sad or unhappy?”). Answer options ranged from “not at all” (0) to “very much” (4). The scores for all three questions were summed with the higher score indicating that an adolescent is highly emotionally reactive.

The figures 40-41 presented below show the proportions and the average scores on Problem Distress at Time 1 and Time 2 for adolescents (aged 13-17) who completed both Time 1 and Time 2 Kidcope surveys (N=49). The percentage of youth who scored low on Problem Distress increased from 22.4% at Time 1 to 42.9% at Time 2 and the percentage of those who scored high on the scale decreased from Time 1 (34.7%) to Time 2 (24.5%). Percentage of adolescents who had moderate scores on Problem distress also decreased from Time 1 (42.9%) to Time 2 (32.7%). These changes indicate positive trends in reduced

levels of high Problem Distress scores over time, and the results of a repeated measures t-test revealed that the overall average score of Problem Distress significantly decreased from Time 1 (M=7.1, SD=2.82) to Time 2 (M=6.1 SD=3.18), ($t(48)=1.99$, $p<.05$, effect size=0.3). In addition, there was also a promising trend in decreasing Problem Distress scores from Time 1 (M=7.1, SD=2.74) and Time 2 (M=5.9, SD=3.09) in the sample of youth with high or very high emotional and behavioural problems (i.e. SDQ Total Difficulties score >16), this change was also statistically significant ($t(26)=1.95$, $p<.05$, effect size=0.4) (see Figure 41).

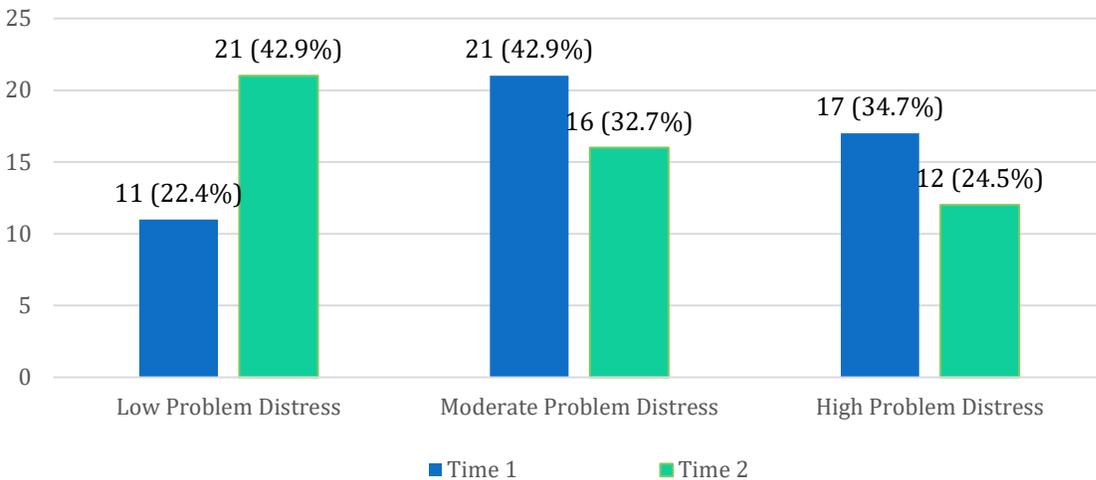


Figure 40: Emotional response to a particular adverse experience among adolescents who completed Time 1 and Time 2 surveys (N=49)

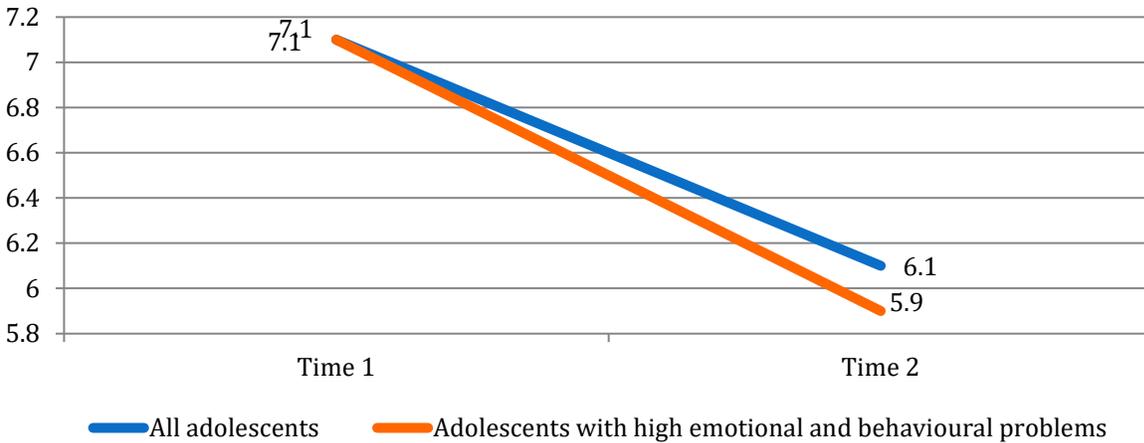


Figure 41: Changes in the adolescents' (aged 13-17 years) average scores of Problem Distress scale from Time 1 to Time 2

In addition, a repeated measures ANOVA test showed that there was a significant difference between girls and boys in their Problem Distress scale over time ($F(1, 47)=4.28$, $p<.05$). Independent sample t-tests were then performed to explore these differences separately at Time 1 and Time 2. As shown in Figure 42, there was a statistically significant difference between boys and girls at Time 1 ($t(121)=-2.57$, $p<.05$, effect size=0.4) and Time 2 ($t(54)=-1.58$, $p<.05$, effect size=0.4).

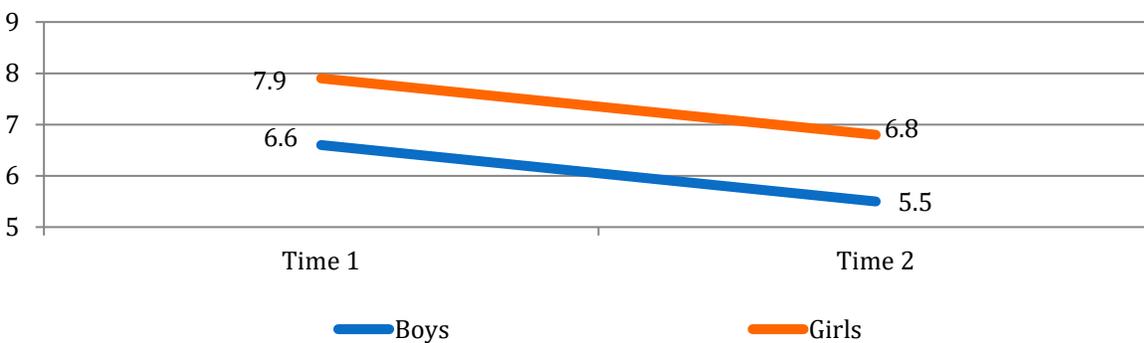


Figure 42: Changes in the average scores of Problem Distress scale from Time 1 to Time 2 between boys and girls

Based on adolescents' answers to 10 questions about their typical reactions and coping behaviours, three overarching categories of coping strategies were calculated (i.e. *Active Coping Strategies*, *Negative Coping Strategies*, and *Avoidant Coping Strategies*). As in Young Children's Kidcope checklist, for adolescents *Active Coping Strategies* category also represented problem solving, emotional regulation, cognitive restructuring, and social support. The total score of the frequency of using active coping strategies ranged from 0 to 12 with the higher scores indicating more frequent use of active coping strategies. *Negative Coping Strategies* category was calculated by summing self-criticism and blaming others strategies, with summed response scores ranging from 0 (infrequent use) to 6 (frequent use). *Avoidant Coping Strategies* represented the use of distraction, social withdrawal, wishful thinking, and resignation coping strategies. Summed response scores ranged from 0-12 with the higher score indicating more frequent use of avoidant coping strategies.

Figure 43 below shows the changes in the average scores of using each coping strategy that occurred over time for adolescents who completed both Time 1 and Time 2 Kidcope questions (N=49). Results of a paired-sample t-test showed that there were no statistically significant changes in the frequency of using *Active Coping Strategies* between Time 1 and Time 2 ($t(48)=-1.1, p>.05$). However, there were statistically significant differences between the mean scores for *Avoidant* and *Negative Coping Strategies* between Time 1 and Time 2. Specifically, the average scores for *Negative Coping Strategies* decreased significantly over time (at Time 1, $M=2.1, SD=1.51$ and at Time 2, $M=1.6, SD=1.52$)

($t(48)=2.13, p<.05, \text{effect size}=0.3$). The mean scores for *Avoidant Coping Strategies* were also significantly lower at Time 2 ($M=4.9, SD=2.24$) than at Time 1 ($M=6.2, SD=2.97$) ($t(48)=2.83, p<.05, \text{effect size}=0.5$). These significant differences suggest that youth attending the Family Centres used *Negative* and *Avoidant Coping Strategies* less frequently at Time 2 as compared to Time 1.

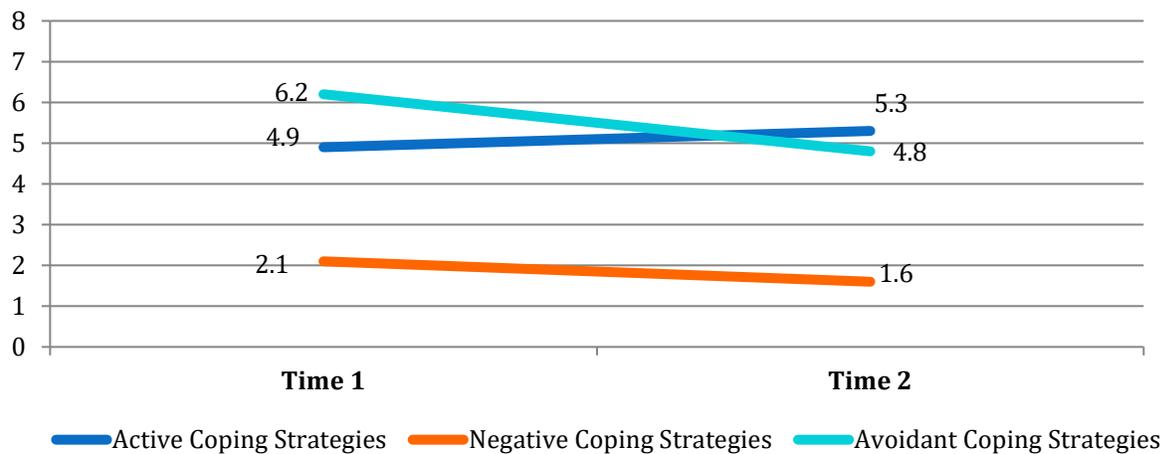


Figure 43: Use of Active Coping Strategies, Negative Coping Strategies, and Avoidant Coping Strategies among youth (aged 13-18) at Time 1 and Time 2

Figure 44 below presents the changes in the average scores in three coping strategies among youth with high or very high emotional and behavioural problems who completed Kidcope checklists at Time 1 and Time 2 ($N=27$). While some positive changes can be seen in the changes of average scores (e.g. the mean score for *Active Coping Strategies* increased over time), only decreases in the average scores for *Avoidant Coping Strategies* was significant over time (at Time 1, $M=6.3, SD=3.07$, at Time 2, $M=4.7,$

SD=2.97), ($t(26)=3.27$, $p<.05$, effect size=0.5).). No significant differences were found in coping strategies among boys and girls.

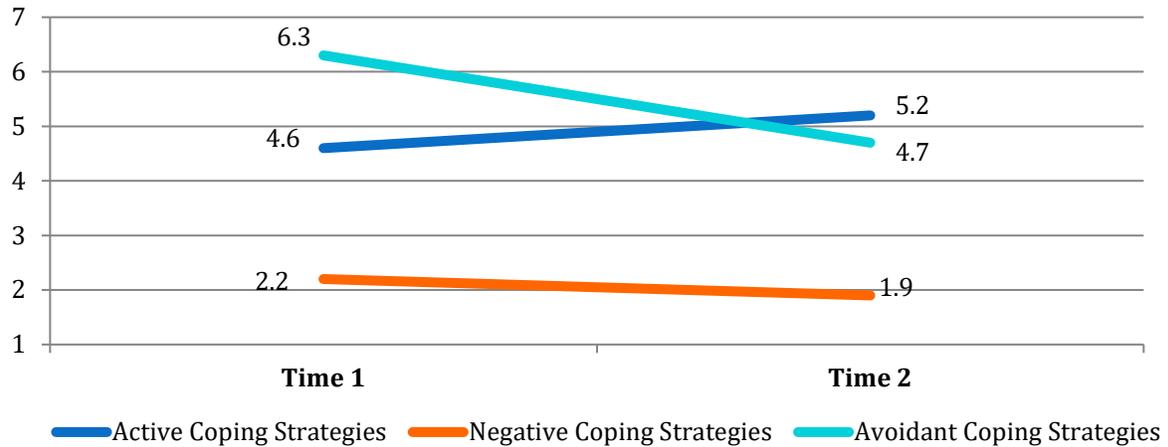


Figure 44: Use of Active Coping Strategies, Negative Coping Strategies, and Avoidant Coping Strategies over time among youth (13-18) with high or very high emotional and behavioural problems (N=27)

Chapter Seven: Section Summary & Conclusions

This section first described key characteristics of children, parents and families attending therapeutic interventions offered by Family Centres. It then presented results of analyses conducted to determine if these therapeutic interventions exerted positive changes for participants from pre-intervention or 'Time 1' to post-intervention or 'Time 2', as assessed using a range of outcome measures or scales tapping into child, parent and family adjustment. Key findings include the following:

- Children involved in Family Centre interventions ranged from infants to adolescents but the majority (64%) were aged 5 to 12 years. Over ninety five percent of the children were Irish. Just under a quarter were reported to have physical or mental health problems such as anxiety, ADHD, ODD, asthma, dyslexia, and speech and language difficulties.
- Parents reported that almost all children (93.8%) experienced at least one stressful life event (e.g. death or illness in the family, moving home, parent in prison). Forty-five percent of these were reported to have experienced four or more stressful life events.
- The majority of adult respondents to the survey were Irish, female and between the age of 30 to 49. Almost half had some form of third level, or higher, education.

- Most parents described their household make-up as being led by a single parent (56.2%). Just under forty percent (38.7%) of households were headed by two parents. For respondents who reported 'other' household compositions (5.1%), some examples included co-living and co-parenting with grandparents and other extended family members, and co-parenting a child in two separate households.
- Half of all adult respondents (50.9%) indicated social welfare payments as the main source of income in the household. This was followed by 44.5% of families where wages or salaries are their main source of income. The majority of families report experiencing difficulty 'making ends meet' (61.9%).

Children's Emotional & Behavioural Adjustment

- In the Family Centres the measure of children's emotional and behavioural strengths and difficulties was completed by parents and their children aged nine years or older. From both parent and children's self-reports all 'problem' measures of conduct, emotionality, hyperactivity, and peer problems significantly decreased from Time 1 to Time 2, while *Prosocial Behavior* significantly increased. These trends also held true for the subsample of children who scored particularly high with regard to 'total difficulties' at Time 1 and thus were characterized as having high or very high levels of emotional and behavioural problems. Effect sizes for these results were considerable, with some suggesting that scores at Time 2 were approaching an improvement of over one standard deviation from scores reported at Time 1.

Parents Mental Health

- In the full sample of parents attending the Family Centres, there was a statistically significant improvement in their mental wellbeing from Time 1 to and Time 2.
- Differences in mental wellbeing scores from Time 1 and Time 2 among parents who scored low on mental health measure at Time 1 (i.e. below 52 on the scale from 0 to 100, when the mean score for the whole sample at Time 1 was 63.7) were considerable, showing a highly statistically significant improvement (effect size=1.64).
- At Time 1, the average wellbeing scores among parents from two-parent households were significantly higher than for parents from single-parent household. Interestingly, this difference was no longer significant at Time 2, with both groups showing significant gains in mental health over time.

Child-Parent Relationships

- From Time 1 to Time 2 parents' perception of the closeness they felt with their child increased significantly, while the level of conflict they reported decreased significantly.
- From Time 1 to Time 2 children's perception of the responsiveness they felt from their parents increased significantly, but the level of control they reported remained the same.

Children's Coping

- The level of distress caused by problems experienced by young people aged 13 to 17 years significantly decreased over the course of the intervention. Their use of more maladaptive Avoidant and Negative Coping Strategies between Time 1 and Time 2 also decreased

significantly, while adaptive Active Coping Strategies were more employed over time, but not to an extent that was statistically significant.

The Growing up in Ireland report on the lives of nine year olds and their families in 2009 (Williams et al., 2009) serves as a fair point of comparison with children attending Family Centres who are predominantly in the 5 to 12 years age-range. With regard to child characteristics two key points are of note. The first relates to differences in the number of children presenting at Family Centres with physical or mental health problems (23.8%) which is more than twice the percentage of children reported with these issues in the nationally representative sample (11%). The second relates to reports of children's experiences of early adversity. While the 93.8% of Family Centre children who have experienced at least one stressful life event is a higher proportion than the 78% reported nationally, it is the differences between the groups in terms of the percentages experiencing cumulative stressors that is particularly concerning. Many life events, though potentially stressful, are recognised as being part of the fabric of young lives. However, contextual risk factors that make children susceptible to such events do not occur in isolation, and it is the combination of various risk factors that can overwhelm a child's adaptive capacities and lead to negative outcomes (e.g. Appleyard, Egeland, Dulmen, Sroufe, 2005). Experiencing 'four or more' stressful life events is often cited as the 'tipping point' that leads to the most detrimental results. Growing Up in Ireland reported that 9% of their nine year olds were in this category. Within Family Centres 45% of children were reported as having experienced four or more adverse events. These

children, and the adults that they will become, are of particular concern to researchers, educators and clinicians.

The educational profile of parents of GUI and Family Centre children is similar, but a higher percentage of Family Centre parents have reported attending some form of higher education training. In terms of household makeup the picture is quite disparate though, with three times as many children attending Family Centres coming from single-parent homes (56.2%) in comparison with GUI children (18%). This latter figure is close to that reported in the last census (Census, 2016) where one in five children grow up with lone parents. Single-parent households are not a homogeneous group and there is much variability in outcomes within these families. Yet research would suggest that the limited financial and interpersonal resources available in some single-parent families puts them at heightened risk for a range of poorer outcomes including consistent poverty (e.g. Watson, et al., 2018) and emotional and behavioural difficulties for children (e.g. Nixon, 2012).

A comparison of children's scores on the Strengths and Difficulties Questionnaire across GUI and Family Centres indicate that Family Centre children are on average experiencing greater problems with all aspects of social, emotional and behavioural functioning and twice as many can be classified as having what the scale developers initially called 'abnormal' or high-very high levels of global difficulties (33.2% Family Centres in comparison with 15% GUI; Williams et al., 2009). By Time 2, however, average scores on total difficulties and each of the subscales that comprise this variable are more

comparable with the nationally representative sample. Even among children experiencing high levels of global difficulties with a Time 1 score of 21.6 (classified as abnormal or very high) have an average Time 2 score of 14.8 that is on the borderline of being just slightly raised. However, it should be noted though that these children may need particular intervention attention as their much improved average scores at Time 2 are the same as the average Time 1 scores for the wider group, that were reduced further at Time 2 (to 10.9). In general, however, results are heartening. From an examination of effect sizes it can be seen that while all children benefit from participating with Family Centres, those children who initially present with the greatest amount or intensity of issues benefit the most, but more work is needed with them to reduce problematic behaviours further.

The Time 1 average score for parents' mental health in the group (63.7) was lower than population averages among Irish (81 reported by Healthy Ireland - Ipsos, 2016) or Australian adults (75 reported by Roy & Schurer, 2013) but improved significantly over the course of Family Centre intervention (72.5 at Time 2). However, the proportion of parents reporting very low levels of mental health is 32% of the overall sample and is very concerning. This is three times as many parents presenting with depressive symptoms than attend ECDS centres or present in population samples (e.g. Roy & Schurer, 2013). Highly significant improvements were noted from Time 1 to Time 2, which is encouraging. Though the average score of 59.8 leaves plenty of scope for further improvements to be gained.

Positive changes were noted with regard to child-parent interactions from both the perspectives of children and their parents. Specifically, children reported more warmth and responsiveness from their parents following the Family Centre intervention and parents reported greater closeness and less conflict with their children. However, there is still some scope for improvements. For example, while the Time 2 average score on the measure of conflict (19.7) was closely aligned with the average score (21.85) for a representative sample of nine year olds in Ireland, the Time 2 average score for closeness was much higher among the general Irish sample (44.74 in comparison with 31.3; Nixon, 2013). Encouraging optimum levels of warmth and engagement between parents and their children is associated with positive adjustment in children and fewer negative outcomes (Nixon, 2013).

Finally, while improvements noted in younger children's coping abilities were not to the extent of reaching statistical significance, the adolescent group saw significant reductions in the distress caused by problems they had encountered and their use of maladaptive coping responses. More positive Active Coping Strategies were reported over time, but not to an extent that was statistically significant. At present the sample sizes are small. Larger samples will afford us greater statistical power so we will continue to monitor child and adolescent data as to the malleability of coping and the ways in which interventions can facilitate more effective approaches to dealing with psychosocial stress and its impact on current and future adjustment and psychopathology.

SECTION THREE:

Moving Forward

Chapter Eight: The Adverse Childhood Experiences Tool for Use in Future Projects

The original Adverse Childhood Experiences (ACE) study was carried out in San Diego, California in the 1990s. The extensive ACE literature details the range of ways adversities experienced in childhood find expression in later life. The model demonstrates that the greater the number of adversities experienced, so the probability for poor health and social circumstance outcomes in later life, exponentially increase. These include the domains of physical (Felitti & Anda, 2009) and mental (Read *et al.*, 2005) health and a myriad of social circumstances from early pregnancy to imprisonment (Bellis *et al.*, 2014). In recent years the ACE questionnaire has been adapted to help better understand the needs of diverse populations whose outcomes are of particular concern for social work and social care professionals, including children who experience domestic violence (McGavock & Spratt, 2016), young carers (Spratt, *et al.*, 2018) and young people who commit suicide (Devaney *et al.*, 2014).

The 10-item ACE instrument has the advantage of being used in both large population surveys and specific population studies. While the instrument was originally designed for self or interviewer completion for over 18 year olds, it has increasingly been adapted for use as a tool for secondary data analysis. The strength of its use as a research tool has been to provide a systematic means of analysing data, bringing to light previously hidden patterns, so as to provide an empirical basis for a theoretical bridge to link exposure to early adverse experiences to outcomes across the life-course.

The survey counts exposure or not to a measure of adversity (each factor on the 10 point series of factors constituting a score of either 0 or 1). Combined affirmative (the adversity has been experienced) and negative (it hasn't) responses with respect to each factor results in a final ACE score, ranging from zero, where the individual has experienced no adversities, to ten, where the full range have been experienced. Each additional factor exponentially increases the probability of an individual experiencing negative impacts upon their wellbeing, as measured across a range of health and social circumstances across their life-course. The factors in the survey include five of abuse directed against the individual and five which are concerned with adverse family circumstances.

The ACE Questionnaire, asks, *Prior to your 18th birthday:*

1. *Did a parent or other adult in the household often or very often... Swear at you, insult you, put you down, or humiliate you? or Act in a way that made you afraid that you might be physically hurt?*
2. *Did a parent or other adult in the household often or very often... Push, grab, slap, or throw something at you? or Ever hit you so hard that you had marks or were injured?*
3. *Did an adult or person at least 5 years older than you ever... Touch or fondle you or have you touch their body in a sexual way? or Attempt or actually have oral, anal, or vaginal intercourse with you?*
4. *Did you often or very often feel that ... No one in your family loved you or thought you were important or special? or Your family didn't look out for each other, feel close to each other, or support each other?*

5. *Did you often or very often feel that ... You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you? or Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?*
6. *Was a biological parent ever lost to you through divorce, abandonment, or other reason?*
7. *Was your mother or stepmother:

Often or very often pushed, grabbed, slapped, or had something thrown at her? or

Sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard?

or Ever repeatedly hit over at least a few minutes or threatened with a gun or knife?*
8. *Did you live with anyone who was a problem drinker or alcoholic, or who used street drugs?*
9. *Was a household member depressed or mentally ill, or did a household member attempt suicide?*
10. *Did a household member go to prison?*

(The ACE study <http://www.acestudy.org/the-ace-score.html>)

While the central purpose of this report is to describe the development, implementation and results of a range of measures designed to chart the impact of service provision, it is also important to consider how the DoCCFS provision may be informed by other sources of knowledge in taking forward the aim of making services ever more effective in meeting needs. To this end the Adverse Childhood Experiences survey instrument has been employed in two studies within DoCCFS. The first of these was in 2016, when between January and June of that year an analysis of Standard Report Forms (SRFs) in each of the Family Centres and Early Childhood Development (ECDS) services was undertaken. An SRF is submitted to the Social Work Department when a concern is deemed to reach the

threshold of concern, as per the Children First Guidelines (2011), and when reduced safety is identified, for reasons of physical, emotional or sexual abuse and welfare and neglect. Given the high numbers of SRFs deemed 'Welfare' emanating monthly from each centre, a pilot study was undertaken to extract further information on these cases using the ACE survey as an assessment tool. A second study was undertaken in the Family Centres and the ECDS services in 2017, to help better understand the links between mothers' histories of adversities as experienced in childhood and the adverse experiences of their own children. The method employed in this study was to examine all the SRFs submitted to the Social Work Department in 2017, alongside referral information, reports and case notes, with additional information from managers and social workers, and subject these data to secondary analysis employing the ACE survey instrument. We draw on the results of these studies for the purposes of this chapter and are indebted to Dolores Carroll, Child Protection Manager within the DoCCFS who authored both the original, internal, reports.

The 2016 report concerning children shows that in most of these cases further SRFs were submitted involving some of the other categories of abuse, such as emotional, physical, sexual and neglect. Of the 36 cases surveyed, only eight cases scored below four. The large majority of these children had ACE scores at what we might term clinical levels. In population studies only around 15% of respondents have scores in excess of four, in this group of children using the DoCCFS services, 89% had scores of four or more, in fact considerably more, the mean score being 5.86. Table 14 captures the distribution of ACES across the ten categories.

Table 14: Children subject to SRFs and adversities experienced.

Child	Substance Abuse	Parental Separation	Mental Illness	Domestic Violence	Criminal Activity	Psychological Abuse	Physical Abuse	Sexual Abuse	Emotional Neglect	Physical Neglect	TOTAL
1	1	1	1	0	1	1	1	0	0	0	6
2	1	1	1	1	1	1	1	0	1	0	8
3	0	1	1	1	0	1	1	0	1	1	7
4	1	1	1	1	1	1	1	1	1	1	10
5	0	1	1	1	1	1	1	1	1	1	9
6	1	1	1	1	1	1	1	0	1	1	9
7	1	1	1	1	1	1	1	0	1	1	9
8	0	0	1	0	0	0	1	0	1	1	4
9	1	1	1	1	0	1	0	0	1	1	7
10	1	1	1	1	0	1	1	0	1	0	7
11	0	0	1	1	0	1	1	0	1	1	6
12	0	0	0	0	0	1	0	0	0	0	1
13	0	1	1	0	0	0	1	0	0	0	3
14	1	1	1	1	0	1	0	0	1	1	7
15	1	1	1	1	1	1	1	1	1	0	9
16	0	1	0	1	0	1	0	0	1	0	4
17	1	1	1	1	1	1	0	1	0	0	7
18	0	0	1	0	0	1	1	0	0	0	3
19	0	1	0	0	1	0	0	0	0	0	2
20	0	0	1	0	0	0	0	0	1	0	2
21	1	1	0	1	0	1	1	1	1	1	8
22	0	1	1	1	0	1	1	0	1	0	6
23	1	1	1	1	1	0	1	0	1	1	8
24	0	1	0	0	0	1	1	0	1	0	4
25	0	1	0	1	0	1	1	0	1	0	5
26	1	0	0	1	0	1	0	0	0	0	3
27	1	1	1	1	1	1	0	0	0	0	6
28	0	1	1	0	0	0	0	0	0	0	2
29	1	1	0	0	0	0	0	0	0	0	2
30	0	0	0	1	0	1	1	0	0	0	3
31	1	1	0	1	0	0	0	0	1	0	4
32	1	1	1	1	1	0	0	1	1	0	7
33	0	1	0	1	0	1	1	0	1	1	6
34	1	1	1	1	1	1	1	1	1	1	10
35	1	1	1	1	1	1	1	0	1	0	8
36	1	1	1	1	0	1	1	1	1	1	9

The following Figure 45 illustrates the frequency of each ACE factor in percentages. It is interesting to note that the five factors concerning adverse family circumstances total 53%, with person directed abuse totalling 47%.

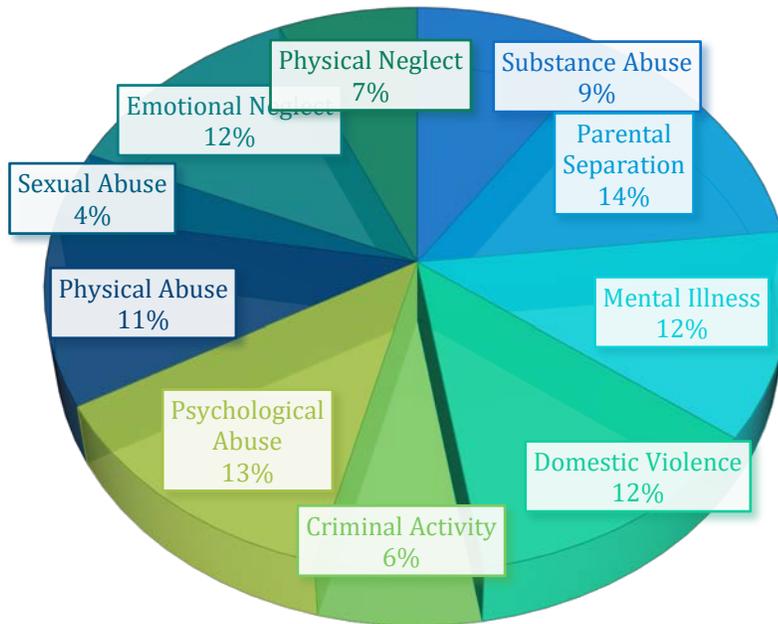


Figure 45: Frequency of each ACE factor experienced by children subject to SRFs.

The final figure illustrates the point made above, namely that very few children have ACE scores of less than four and that incredibly almost half the children (49%) have scores at the very highest level of nine plus.

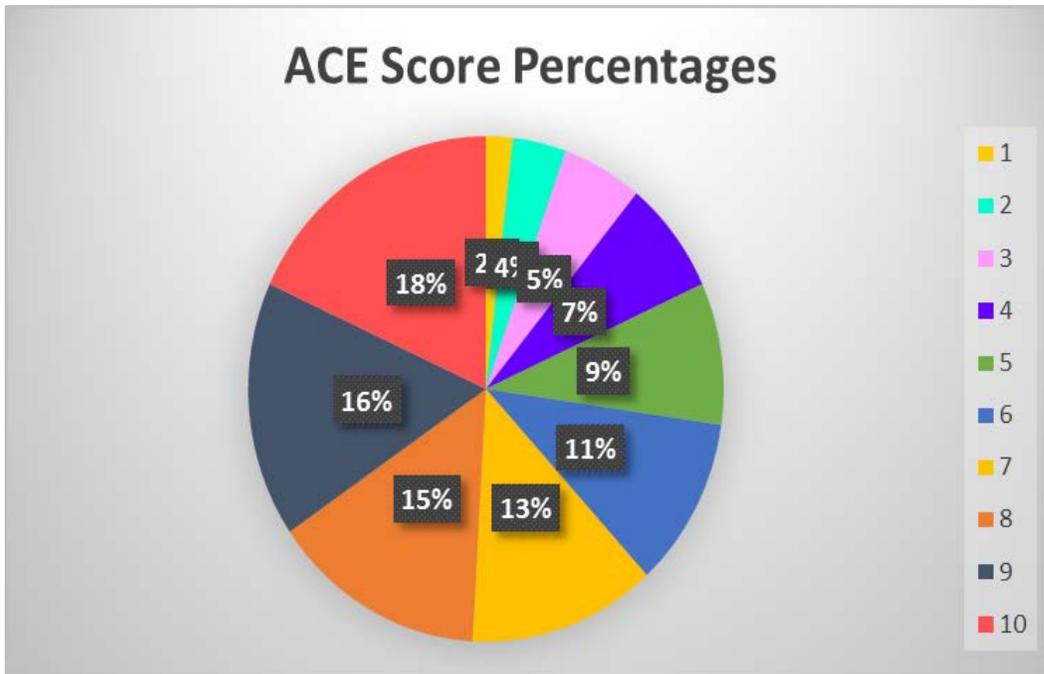


Figure 46: Distribution of ACE scores for children subject to SRFs.

When we turn to the mothers using Family Centres and ECDS services with children who are subject of SRFs we see a similar pattern, with the 165 mothers having a mean ACE score of six.

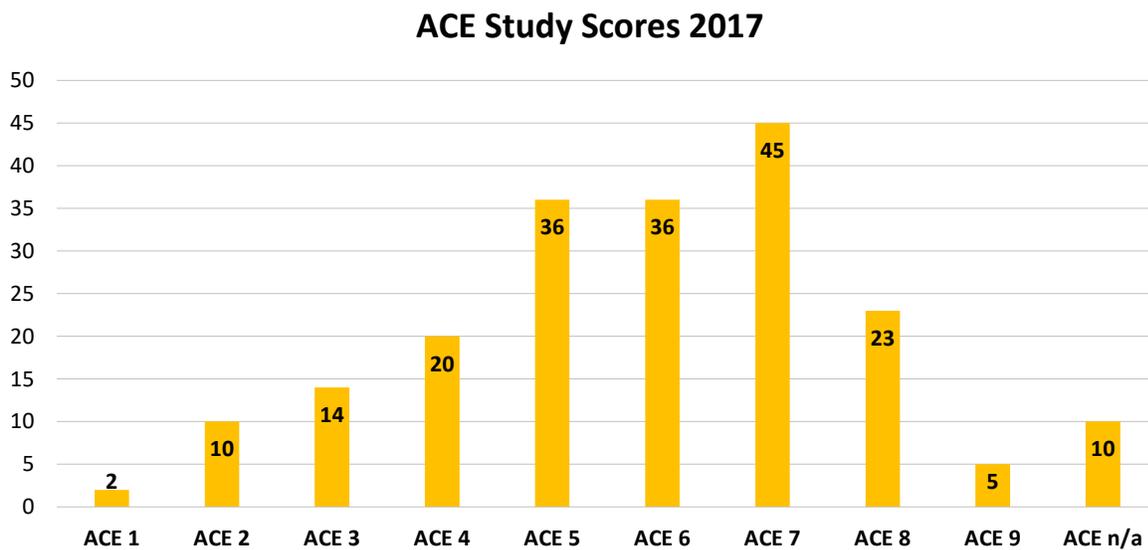


Figure 47: Distribution of ACE scores for mothers of children subject to SRFs.

As the report observes, 'Mothers' ACEs are significantly associated with their children's developmental risk. The findings suggest that addressing intergenerational trauma through focus on childhood adversity among young children's parents may promote child development.'

'Mothers' ACEs are associated with maternal mental and physical health problems. Research has demonstrated that adversity may transfer from one generation to the next in the form of abuse/neglect, housing risk, and poor socioemotional health. Additionally, mothers' history of adversity is associated with depressive symptoms before and after giving birth, and with their infants' maladaptive socioemotional symptoms. By examining the ACE Scores of mothers the research suggests that those with high scores are more likely to have children who will experience adverse childhood experiences. This is very evident in the SRFs submitted to the SWD by the family centres.'

A number of studies have indicated that ACEs may be passed on to the next generation in two ways, the first reflects the high level of toxic stress experienced by the parent with an elevated ACE score as the body is flooded with high levels of cortisol, inducing so-called 'flight or fight' reactions which make it hard to deal with any additional stress without recourse to ameliorative responses, which often involve the use of drugs and alcohol. These short-term fixes have the effect of further reducing the bodies' immune system to resist physical disease, with mental health also likely to be poor. The second influence is parenting that may be compromised in ability to meet the developmental

needs of the child as current stress compounds the mother or father's own experience of childhood adversities.

These data demonstrate that reasons for referral to the DoCCFs may only indicate the tip of an ACE iceberg, for both parents and children. The category of 'Welfare' for children, who are the subject of SRFs, covers a multitude of additional categories of abuse and adverse family circumstances. Such profound intergenerational damage is unlikely to be halted without the provision of long term therapeutic help. As the evidence in this report has demonstrated, the DoCCFs services do have a demonstrable positive impact on the referred population. It may be, however, that we have within this population a sub population, whose high child and parent ACE scores limit the effectiveness of standard interventions. To more fully address this question we will draw on future data emanating from the revised set of assessment measures, which now include the ACE survey questionnaire. The use of the ACE survey has already been successfully piloted within the Dublin Safer Families service, with early results proving encouraging, both in terms of staff enthusiasm for the project and almost universal 'buy in' by service users. ACE training has now been provided for the wider group of the DoCCFs staff, with addition of this instrument to the existing evaluation measures scheduled for introduction in all services by September 2018.

This is a significant development and represents the next 'wave' in the development of evidence-based services within the DoCCFs. ACE scores have very powerful predictive value for our future life trajectories, with higher scores indicating poorer outcomes across

a range of domains, including physical and mental health and social and economic circumstances. Evidence on what helps promote resilience in individuals to reduce the odds of unwanted outcomes occurring has pointed to having one dependable adult available during childhood as having significant influence in moderating the effects of high ACE scores. Services, however, have tended to make a value of short term and focussed interventions as being both more efficient (a way of rationing resources) and effective (in general terms by measuring only shorter term effects of interventions and remaining blind to longer term outcomes). This position is challenged by the results of longitudinal studies, which tend to show that some significant outcomes of adversities experienced in childhood. This poses questions as to how services might adapt to provide access to the longer-term relationships that may be helpful to those with higher ACE scores in buffering against their realisation of poor life outcomes. As we study the results emanating from the introduction of the ACE survey instrument within the DoCCFS, it may be that these stimulate consideration of radically reconfigured services in the future.

Chapter Nine: Conclusions & Recommendations

The data presented in this report presents a consistent pattern across both UCD and TCD research partnerships with the Daughters of Charity Child and Family Services. Our current instrumentation, which represent a refined and bespoke suite of measures, capture the ways in which families attending both the ECDS and Family Centres have benefitted across a range of outcomes including child adjustment and coping, parent mental health, child-parent relationship quality, and school readiness.

However, as our measures become every more sophisticated and assessments are carried out with increasing fidelity to protocol, so other issues become apparent. We do not capture the experiences of those who exit the services early and the recent ACE studies indicate that some of those families staying within services are carrying profoundly damaging experiences, for whom new services may in the future have to be designed and delivered.

At this juncture, however, we are in a position to offer some clear and compelling 'take home' messages from the results to date. These may be summarised thus:

- We have now some six years of cumulative data, which demonstrate that those families who receive services generally benefit from them. Where some improvements noted are modest in nature, they may represent turning points in the lives of individuals, influencing their future life trajectories in positive directions.

- Children and their parents presenting at Time 1 with the most concerning scores reflecting their psychological and behavioural functioning made highly significant levels of progress by Time 2. This is extremely encouraging and should prompt reflection on the possible development of differential pathways within services for children and parents based on these initial scores. In addition, improvements noted with regard to parental mental health, particularly those whose scores indicate that they are struggling, provide evidence of direct service impact upon the intergenerational transmission of an ACE score.
- Differences found among Irish vs non-Irish children and parents highlight the vulnerabilities existing in migrant communities. This may require consideration of development of service awareness and adaption in meeting the particular needs of these groups.
- The use of the ACE survey instrument has already demonstrated promising early results and the soon coming universal adoption of this tool is likely to both further help us understand more deeply the differentiated needs of those using services and provide a stimuli for the further modification of existing service and perhaps the introduction of new ones in providing bespoke interventions.

Aside from these higher-level messages from the research there are a number of areas where we might identify some stimuli to the future service development in line with the results of the research:

- There is a need to tailor programming towards those families who present at Time 1 with parents reporting low levels of mental health and children with high levels

of socio-emotional and behavioural issues. This is especially important to highlight among families that are at risk of dropping out.

- Who are the families who are not engaging with services or who drop out of services? Who are the families who engage but do not benefit? How can their needs be tended to? Addressing these questions requires further analysis, although this is difficult because we lack some completed data at Time 1 and Time 2. However it may be possible to interrogate referral information and compare this with the profiles of those completing services.

The process of monitoring outcomes should be continued. The following methodological considerations are offered:

- As judgments about the effectiveness of an intervention depend on the criteria used to evaluate it the present measures should remain under constant review as they may require further refining.
- A close eye should be kept on surveys being returned with a sizeable amount of missing data to try to understand the reasons for incomplete surveys and skipped sections. Some variables in the present report had demographic information missing for up to twenty percent of respondents. As such we are limited in how well some descriptors fully reflect all DoCCFS service users.
- To truly claim the effect of intervention on the key outcomes measured in this report, we need to apply more rigid evaluation design, ideally randomized control trial, with a control group of families. For now, we should be cautious when fully attributing changes in post- intervention scores to the programme and services

delivered to the families (general effect observations notwithstanding).

- Typically, intervention evaluations exclusively focus on effect evaluation, with limited attention of the mechanisms and process issues driving or underpinning the change process. As such, the reasons for the failure and success of interventions are often poorly understood. Process evaluation focuses on evaluating the mechanisms of change, rather than the outcome of change (effect evaluation) and could be considered in future research.
- The use of long-term follow up is important, and could be considered in future intervention evaluation so as to assess if the gains we see now are stable and enduring over time.

In summation, the present report represents a positive and lively engagement between the DoCCFS, their service users, and researchers in seeking answers to questions with the potential to make real and positive changes in people's lives, not only in Ireland, but internationally, as the important results of this research are disseminated and influence the provision of services in offering evidence for positive intervention.

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Appendix A

Analysis of Engaged vs. Disengaged Families Attending Family Centres

Analyses were performed to compare families who completed Time 1 and Time 2 surveys (i.e. engaged cases or 'completers') with families who completed Time 1 surveys but then disengaged from the service before Time 2 data could be collected (i.e. 'dropouts'). The number of families in each sample was 67.

Independent sample t-test analysis was used to evaluate the significance of group differences in Time 1 data. As seen in Table 15 below, completers and dropouts did not differ significantly on the majority of demographic variables, except for the parent's (guardian's) present age (adult caregivers in the engaged families were significantly older [$M=40.1$, $SD=7.35$] than adults in the dropout families [$M=37.6$, $SD=7.31$] [$t(131)=-2.02$, $p<.05$, effect size=0.3]) and their age when they first became a parent (adult caregivers from the dropout cases were significantly younger [$M=22.9$, $SD=5.74$] than their counterparts in engaged families [$M=26.1$, $SD=6.79$] when they first became parents [$t(127)=-2.91$, $p<.01$, effect size=0.5]).

Table 15 also details differences in Time 1 mean scores on the key outcome measures between the two groups. As seen in the table, while most Time 1 mean scores were slightly better among engaged families, the only statistically significant difference between the two family groups was *SDQ Conduct* scores. That is, children in the families that eventually disengaged from the Family Centres were reported to have significantly

higher conduct problems ($M=3.9$, $SD=2.49$) than those in engaged families ($M=2.9$, $SD=2.52$), ($t(131)=2.37$, $p<.05$, effect size=0.4).

Table 15: Mean scores of demographic characteristic and outcome measures at Time 1 between engaged and dropout families.

Variable		Group 1:		Group 2:	
		Completers		Dropouts	
		N=67		N=67	
		N	%	N	%
<i>Child's Gender</i>	<i>Male</i>	40	59.7	33	49.3
	<i>Female</i>	27	40.3	34	50.7
<i>Child's Age</i>	<i>Mean</i>	10.16		10.45	
	<i>Stand. deviation</i>	2.63		4.24	
<i>Adult Gender</i>	<i>Male</i>	10	14.9	12	17.9
	<i>Female</i>	57	85.1	55	82.1
<i>Adult Age</i>	<i>Mean</i>	40.13*		37.56*	
	<i>Stand. deviation</i>	7.35		7.31	
<i>Age of becoming parent first time</i>	<i>Mean</i>	26.14*		22.90*	
	<i>Stand. deviation</i>	6.79		5.73	
<i>Marital Status</i>	<i>Single</i>	20	29.9	29	43.3
	<i>Married or co-habiting</i>	29	43.3	20	29.9

	<i>Separated/ divorced</i>	18	26.8	18	26.8
Household Composition	<i>Single parent family</i>	38	56.7	42	62.7
	<i>Two parent family</i>	29	43.3	25	37.3
Income	<i>Wages or salaries</i>	38	56.7	34	50.7
	<i>Social welfare payments</i>	29	43.3	33	49.3
Stressful experiences	<i>< 4</i>	39	58.2	33	49.3
	<i>> 4</i>	28	41.8	34	50.7
Is the family receiving any other therapeutic service?	<i>Yes</i>	22	32.8	15	22.4
	<i>No</i>	45	67.2	52	77.6
SDQ	<i>Mean</i>	5.55		5.05	
Emotionality	<i>Stand. deviation</i>	2.69		2.92	
SDQ Conduct	<i>Mean</i>	2.88*		3.91*	
	<i>Stand. deviation</i>	2.52		2.49	
SDQ	<i>Mean</i>	5.25		5.48	
Hyperactivity	<i>Stand. deviation</i>	2.97		2.98	

<i>SDQ Peer Problems</i>	<i>Mean</i>	3.04	2.85
	<i>Stand. deviation</i>	2.32	1.99
<i>SDQ Prosocial Behaviour</i>	<i>Mean</i>	8.42	7.85
	<i>Stand. deviation</i>	2.02	2.57
<i>SDQ Total</i>	<i>Mean</i>	16.73	17.29
	<i>Stand. deviation</i>	6.83	7.15
<i>MHI-5</i>	<i>Mean</i>	64.78	59.94
	<i>Stand. deviation</i>	22.58	22.08
<i>CPRS Closeness</i>	<i>Mean</i>	29.58	29.11
	<i>Stand. deviation</i>	5.09	5.49
<i>CPRS Conflict</i>	<i>Mean</i>	21.79	23.87
	<i>Stand. deviation</i>	9.32	8.74

* Statistically significant difference between the two groups ($p < .05$).