Research Report DFE-RR194

The Care Placements Evaluation (CaPE) Evaluation of Multidimensional Treatment Foster Care for Adolescents (MTFC-A)

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Note on Contributors

Professor **Nina Biehal** and Professor **Jonathan Green** were co-principal investigators on the evaluation. They were responsible for the overall design and management of the research and contributed to the analysis and writing-up of the final report.

The roles of the others on the project were as follows:

Jo Dixon was lead researcher on the evaluation and was responsible for managing recruitment and data collection. She contributed to the research design, coding of primary outcome measures and to the analysis and writing-up of the final report.

Dharmi Kapadia was a researcher on the evaluation. She shared responsibility for the tasks of data collection and contributed to preparation of the data, coding the primarily outcome measures and conducting inter-rater reliability tests.

Catherine Kay was a researcher on the evaluation with responsibilities for data collection, design and implementation of the primary outcome measures and data preparation, and contributed to the analysis and writing-up of the final report.

Dr **Chris Roberts**, statistician from the University of Manchester Biostatistics Group, was responsible for the conducting the primary outcome analysis, presented in Chapter 13.

Anna Roby was a researcher on the evaluation and contributed to data collection and data preparation.

Dr **Justine Rothwell** was a researcher on the evaluation. She shared responsibility for data collection and contributed to preparation of the data, coding the primarily outcome measures and conducting inter-rater reliability tests.

Elizabeth Parry was a researcher on the evaluation with responsibilities for data collection, coding of primary outcome measures and data preparation and contributing to the analysis and writing-up of the final report.

Professor **Ian Sinclair** was consultant to the evaluation and contributed significantly to the design of the research, and the outcome analyses and write-up presented in Chapter 14.

Section 1: Introduction and Methods

Chapter 1 Introduction

Multidimensional Treatment Foster Care (MTFC) is a wrap-around multi-modal intervention for children and young people with challenging behaviour. It was initially developed and tested by the Oregon Social Learning Centre (OSLC) in the USA as an alternative to institutional placement. It has been is named in the National Registry of Evidence-based Programs and Practices in the USA and is considered to be well-supported by research evidence, in relation to children who are similar to child welfare populations, by the California Evidence-Based Clearinghouse for Child Welfare.

The British government introduced it in England in 2002 as a national pilot programme, supported by pump-priming money from the former DCSF and by a National Team to provide training, support and consultancy and ensure fidelity to the MTFC model. In England, the introduction of this evidence-based, multi-agency wraparound service was prompted by concerns about poor outcomes for many looked after children and about the placement instability often experienced by these children.

This initial pilot focused on adolescents and became known as the MTFC-Adolescents (MTFC-A) programme. The first English MTFC foster placements were made in 2004, and this evaluation of the MTFC-A pilot programme by the universities of Manchester and York began in 2005. The Youth Justice Board (YJB) subsequently introduced another MTFC pilot programme, known as Intensive Fostering, with the aim of reducing re-offending by persistent young offenders. This was targeted at young people in the youth justice system rather than the care system and has been separately evaluated (Biehal, Ellison, Sinclair*, et al.*, 2010; Biehal, Ellison and Sinclair, 2011).

Evidence of the effectiveness of MTFC with a variety of groups has been demonstrated by eight randomised controlled trials and a number of other studies by the OSLC team, but the only evaluations of its use with adolescents have focused on young offenders. The effectiveness of MTFC with older children and adolescents already in the care system has not previously been evaluated. All other evaluations to date have been undertaken by the programme developers or, in Sweden, by the national implementation team. A systematic review of five evaluations of MTFC reported positively on the effectiveness of MTFC. However, the reviewers expressed concern about the generalisability of the results, as all studies had been conducted in the USA and were considered to be potentially subject to bias, given the involvement of the programme developers in all of them (Macdonald and Turner, 2009). Only one independent evaluation of MTFC has been conducted to date, the Intensive Fostering evaluation of MTFC as an alternative to custody for young offenders. This report therefore presents the findings of only the second independent evaluation of

MTFC, and the first to evaluate its use with older looked after children and adolescents.

This study, the Care Placements Evaluation (CaPE), has two components: a small randomised controlled trial embedded within a larger quasi-experimental observational study. The aim of the evaluation was to compare outcomes for two groups of young people with complex needs aged 10-16 years:

- Those who enter treatment foster care placements within the MTFC model.
- Those in the other types of care placement usually available to this group of young people, including both foster and residential care.

The study used both quantitative and qualitative methods to assess outcomes for the children, who were assessed one year after they entered their MTFC placement or,. for most of those in the control group, one year after entry to a new alternative placement in residential or foster care. The primary outcome of interest was general adaptive functioning, but a number of secondary outcomes were also assessed, including behaviour, mental health, placement at follow-up and participation in education.

Since most previous evaluations of MTFC have been undertaken in the USA and have focused on groups of children and young people that were different in important ways to those in the current study, this study is the first to report on:

- Outcomes of MTFC with older children and young people in the care system, a group for whom it has not previously been evaluated.
- Outcomes of MTFC when implemented in an English context, which differs from the child welfare context in the USA in a number of ways, for example, care is used for a wider population of children in the USA (Thoburn, 2009) .
- The views of young people, carers and MTFC teams on the process and outcomes of MTFC.

Chapter 2 Background to the Study

This chapter describes the MTFC programme developed in the USA and presents some evidence on its effectiveness drawn from other studies. It then describes the implementation and operation of MTFC in England.

2.1 The MTFC programme

MTFC is a community-based, multimodal intervention which aims to encourage and reinforce positive behaviours in children and young people. It was initially designed for work with boys with serious and chronic criminal behaviour and was later extended to girls. It has also been successfully developed and tested as an alternative to hospitalisation for adolescents with mental health problems and as an early intervention with very young children at risk of long-term care (Chamberlain and Reid, 1991; Chamberlain, Ray and Moore, 1996; Chamberlain and Reid, 1998; Fisher, Burraston and Pears, 2005). The MTFC model was established by Patricia Chamberlain and her colleagues at the Oregon Social Learning Centre (OSLC) in the USA in 1983. The programme is grounded in social learning theory (Bandura, 1977) and systemic theory, and is rooted in practice development and research conducted at the OSLC since the 1960s (Patterson, 1982; Patterson, Reid and Dishion, 1992).

As its name suggests, MTFC differs from routine foster care in that it offers treatment as well as substitute care. The intervention employs multiple methods, including individual and family therapy, social skills training and support with education. MTFC provides young people with a short-term foster placement, usually intended to last around nine months, followed by a short period of aftercare. Intervention both during the foster placement and in the aftercare period has four key elements:

- Provision of a consistent reinforcing environment in which young people are mentored and encouraged.
- Provision of a clear structure, with clearly specified boundaries to behaviour and specified consequences that can be delivered in a teaching-oriented manner.
- Close supervision of young people's activities and whereabouts at all times.
- Diversion from associations with anti-social peers and help to develop positive social skills that will help young people form relationships with more positive peers (Chamberlain, 2003).

Individual treatment plans are developed for young people and are regularly reviewed. These treatment plans are underpinned by a conceptualisation of negative behaviours as skills deficits, and aim to help young people learn to take more responsibility for and control of their behaviour. Although the management of behaviour is a key element of treatment, the plans also focus on re-learning and skills

development for young people, including emotional regulation and managing feelings and relationships with family, peers and other adults.

Behaviour is closely monitored and positive behaviours are reinforced in a concrete manner using a system of points and levels. At the start of the programme young people's activities are more restricted, but during the course of the programme they move through a series of 'levels,' each of which brings increased privileges and enhanced incentives. At Level 1, which is for the first three weeks, they are supervised at all times but join in all the usual family activities. The intention during this period is to allow the young person and foster family to get to know each other, for young people to settle into their new homes and for the foster carers and clinical teams to work out what might motivate them and what behaviours and skills to work on first.

Young people are awarded points for any positive behaviours (including routine behaviours, such as getting up in time for school each day) and these points gradually accumulate, allowing them to move through the levels of the programme. Negative behaviours have consequences, as points previously earned are deducted and sometimes young people may be demoted to the previous level. The principal focus of the points and levels system is on positive reinforcement, with many more points awarded for positive behaviours than are removed as a consequence of negative behaviours. Young people can only be demoted to Level 1 if they get less than the required number of points required to stay on Level 2 or Level 3. If the young person then gains the required number of points the next day they return to the previous level. Points and levels provide a concrete method, based on social learning theory, of reinforcing positive behaviour and reducing negative behaviour, allowing positive, calm, non-threatening, discipline methods to be used and reducing the emotional tensions which create difficulties for foster carers and increase the likelihood of placement disruption.

This daily programme of positive reinforcement is delivered by foster carers specially trained as MTFC carers. These carers are provided with intensive support, intended to be available 24 hours a day, seven days a week. The young people's progress is tracked on a daily basis, as MTFC staff conduct brief telephone interviews with all foster carers every day. During the course of these calls staff complete the Parent Daily Report (PDR), a checklist which enables the team to monitor problems, progress and carer stress. The PDR call provides the professional team with a daily opportunity to review developments and to offer carers advice and support.

The original aim of the programme developed in the USA was that, in most cases, the young people would return to their families. In England, the MTFC programme for adolescents mainly serves young people who have been looked after for several years and, for this group, a return home is rarely the plan. In its English setting, therefore, the aim of MTFC-A is to provide children and young people with a stable,

family-based placement, which in most cases will be in foster care, once they leave the programme. To ensure that any gains made while in the foster placements are not lost once the young person leaves the placement, birth family therapists working in the MTFC teams also undertake work with follow-on carers both during the foster placement and the aftercare period. The aim is to ensure that in the environment to which he or she moves on, the young person continues to receive a reasonable degree of consistent and authoritative care and support and that desired behaviours continue to be encouraged and reinforced in a positive manner.

To accomplish these aims, MTFC offers an intensive programme delivered both by a highly trained professional team and by highly trained and supported foster carers. MTFC teams are led by Programme Supervisors and include birth family therapists, individual therapists and skills trainers. Programme Supervisors have small caseloads (typically ten young people and families in the USA) and act as case managers. They coordinate the intervention and ensure consistency of treatment within the team. In the USA they are on call to foster carers and birth families seven days a week, 24 hours a day, although in England this duty may be shared with other members of the staff team. The Programme Supervisors lead two weekly meetings, one with the programme staff, known as the clinical team, and the other with the foster carers on the programme. During these weekly meetings progress and problems are reviewed, drawing on data from the PDR as well as on verbal reports from carers and professionals during the meetings and, if necessary, young people's individual behaviour management plans are modified.

The intention is that after nine months in treatment foster care, young people will accumulate sufficient points to move to the highest level on the programme. When they are judged to have made sufficient progress to leave the foster placement, they and their families (or alternative carers) receive aftercare support from the team, usually for three months.

2.2 Research on MTFC

Although the OSLC have conducted many evaluations of the use of MTFC with a variety of populations, no studies to date have evaluated the use of MTFC with older looked after children and adolescents. However, three key studies of MTFC by the OSLC team are of particular relevance to this evaluation by virtue of their focus on adolescents. All compared MTFC favourably with residential alternatives. An early quasi-experimental study compared outcomes for a group of 16 severely delinquent young people committed to a state training school who were diverted to MTFC, with those of a group of 16 others who had been diverted to group care, residential treatment centres or intensive parole supervision (Chamberlain, 1990). By two year follow-up, the MTFC group was found to have been incarcerated less frequently, and for shorter periods of time.

A subsequent randomised control trial, with a sample of 79 12-17 year-old boys with histories of serious and chronic delinquency, compared a group placed in MTFC with others placed in a variety of community-based residential programmes which offered either individual or group therapy and used a positive peer culture approach to treatment (Chamberlain and Reid, 1998). Between placement and follow-up (one year post-discharge), only 59 per cent of the MTFC group had any 'criminal referrals' compared to 93 per cent of the control group. As a group, they also spent fewer days incarcerated (a mean of 32 days for the MTFC group compared to 70 days for the control group).

Another randomised control trial, this time focusing on 81 female young offenders age 15-19 years, also reported positive effects for MTFC. By follow-up, 12 months after the placements began; girls placed in MTFC had spent significantly fewer days in locked settings than those placed in community-based residential care, with a mean of 21.70 days for the MTFC group compared to 56.45.days for the control group (Leve, Chamberlain and Reid, 2005). Differences between the groups were still evident two years after the baseline assessments (Chamberlain, Leve and DeGarmo, 2007). A systematic review which focused on five randomised controlled trials of MTFC, including the three above, identified clinically meaningful decreases in anti-social behaviour, the number of criminal referrals, days running away and days spent in locked settings (Macdonald and Turner, 2009).

In Sweden, MTFC has been used as an intervention for young people who have a diagnosis of conduct disorder and are considered to be at immediate risk of out-of-home placement. A randomised controlled trial was conducted by the Swedish team responsible for implementation of the programme in that country. The study followed up 35 young people for two years, comparing a group placed in MTFC with others placed in foster or residential care or remaining at home. MTFC was found to have a positive effect on externalising behaviour, as reported by the young people themselves. Parent reports also indicated a group difference in externalising behaviour in the same direction, but this did not reach statistical significance (Westermark, Hansson and Olsson, 2011)

The only UK evaluation of MTFC to date has been the Intensive Fostering evaluation, which evaluated the use of MTFC as an alternative custody for persistent young offenders. This found that Intensive Fostering was more successful than custody in reducing reconviction during the initial follow-up period, one year after the young people entered their foster placements and the control group left custody. By the end of this period those who had entered Intensive Fostering were more likely to have engaged with education and training, more likely to be living in the community and less likely to be associating with anti-social peers. However, during the year after the MTFC group left their Intensive Fostering placements they moved from a situation of intensive support to very little and were no longer diverted from pro-criminal peers. In this context the gains made while in MTFC appeared to wash out and reconviction

rates rose sharply (Biehal, Ellison, Sinclair *et al.*, 2010; Biehal, Ellison and Sinclair, 2011).

Finally, an English study has compared the costs incurred by a sample of 24 adolescents placed in MTFC for at least six months with those for young people with similar care histories and needs living in alternative placements. It found that the social care costs incurred for the MTFC young people in the first six months of placement were around 15 per cent lower than those they had incurred in the six months prior to entry. The study also found that the costs of MTFC were similar to those for a placement provided by an independent fostering agency and lower than the cost of both in-house and out-of-authority residential care (Holmes, Westlake and Ward, 2008).

2.3 The introduction of MTFC in England

The piloting of MTFC represents one of a range of government initiatives to tackle problems in the care system since the Labour administration came to power in 1997, when the Government began a radical overhaul of the system of public care within a broader programme of change in services for children. In the late 1990s the *Quality Protects* and *Choice Protects* policy programmes brought renewed attention to services for looked after children, focusing, among other things, on placement stability, quality and choice. From 1998, a focus on increasing adoption from care and the subsequent passing of the Adoption and Children Act 2002 aimed to increase the use of permanent placements outside the care system for children who could not be reunified with their parents. These were followed in 2004 by the *Every Child Matters: Change for Children* programme which focused on improving outcomes for all children, including those in public care, and by the Children Act 2004, which aimed to bring about a reconfiguration of children's services in England. In 2006 the Government published its initial consultation paper *Care Matters*, which included proposals for the reform of foster care and for the piloting of other specific interventions within the care system, such as social pedagogy.

It was within this context that the English MTFC programme began in 2002, when English local authorities were invited to bid for pump-priming funding to develop multi-agency treatment foster care teams. The first six authorities were recruited in 2002. This was followed by three further funding rounds in which a total of 18 local authorities were eventually recruited to the national pilot programme. A National Implementation Team was also established, based at the Maudsley Hospital in London and at Booth Hall Hospital in Manchester, to provide local authorities with support in developing MTFC programmes in their areas and to subsequently provide training and support to the MTFC teams and to monitor treatment fidelity.

The National Implementation Team supported multi-agency steering groups in each authority, set up the local MTFC teams and oversaw their development and progress. Each local steering group and team was provided with a named site consultant by the National Team who visited weekly during the first three months of implementation and provided ongoing consultancy. The first placement in treatment foster care was made towards the end of 2004.The process of establishing the local MTFC teams often proved to be lengthy and their initial operation was sometimes delayed by problems with multi-agency partnerships, the recruitment of staff and foster carers, the time needed for training and difficulties with the recruitment of young people to the schemes programme (Roberts, 2007).

The programme developers, the Oregon Social Learning Centre, provide telephone consultation to the National Implementation Team to ensure treatment fidelity in the English pilot programme. When the OSLC judges that local teams have sufficient experience and are consistently delivering the MTFC programme as intended, the programmes may receive OSLC accreditation. In 2008, the National Implementation Team became Network Partners with the OSLC enabling them to offer consultation services to organisations outside the pilot projects.

The initial MTFC programme was renamed MTFC-Adolescents (MTFC-A) to distinguish it from MTFC programmes for other groups which were subsequently introduced. Alongside MTFC-A, the MTFC-Prevention programme (MTFC-P) was established to work with three to six year olds who are looked after, followed by the MTFC-C programme for seven to 11 year olds and the KEEP programme for mainstream foster and kinship carers, which trains them in using the same principles as the MTFC programme (National Implementation Team, 2009). A series of annual reports by the National Team giving full details of MTFC team development, training and support may be found on the website www.mtfce.org.uk.

In 2010 there were seven English MTFC-A programmes in operation. One of these has been certified by the OSLC as an accredited MTFC site and the six other teams, including one in Scotland, were contracted with the National Implementation Team under a Network Partnership agreement and are working towards certification by the Oregon Social Learning Centre (National Implementation Team MTFCE, 2010). Some of the original teams have left the programme for a variety of reasons, including local changes in funding priorities sometimes linked to changes in the commitment of partner agencies; associated problems with sustainability once pump-priming funding ended; personnel changes, insufficient referrals from social workers and, in a few cases, a desire to introduce modifications to the MTFC programme which are external to the model.

2.4 The English MTFC-A programme

Consistent with the MTFC intervention as developed in the USA, the English programme aims to provide young people with systemic responses to their behaviour, increased problem-solving and relationship skills, the opportunity to develop pro-social behaviours, to participate and progress in education and, where appropriate, to improve their relationships with their families. The English model offers single placements in foster homes and aims to provide these young people with a secure base in foster care, albeit for the limited duration of their MTFC placement (Roberts, 2007). Site consultants from the National Implementation Team, who are attached to each MTFC team, provide advice and support to the teams and monitor fidelity to the MTFC model as developed by the OSLC. These site consultants, who have extensive professional experience in psychology or social work, attend the weekly clinical meetings of MTFC teams during the first three months of the programme and provide ongoing consultancy for a period of time thereafter.

The multi-agency English MTFC teams consist of social work and education staff appointed by Children's Services and mental health staff from Child and Adolescent Mental Health Services (CAMHS). The English teams include two additional staff in roles not required by the OSLC: a part-time Programme Manager to oversee the management of the team, allowing the Programme Supervisor to focus on clinical work, and an Education Support worker, who is often a teacher. A full MTFC-A clinical team comprises:

- A Programme Supervisor, to oversee the therapeutic work of the team with each young person.
- A Programme Manager, to manage the team, set-up local systems and deal with finance and sustainability.
- A Foster Carer Recruiter/trainer, to recruit and train foster carers.
- A Young Person's Individual Therapist, to undertake therapeutic work with the young people.
- A Skills Coach, to work with young people on developing their social skills.
- An Education Support Worker, to help obtain education placements, help young people integrate into school and support them there and to encourage schools to use positive incentives.
- A Birth Family Therapist, to work with parents or follow-on carers.
- Consultancy by a psychiatrist, offering one or two sessions a week.
- A clinical psychologist offering one or two sessions a week to assist with intake assessments (unless a psychologist is appointed to the role of Programme Supervisor or Individual Therapist).

For the first few years of the pilot programme all clinical team staff and foster carers were trained in the core principles, theory and practice of the MTFC model by OSLC

staff who came over from the USA, and subsequently by OSLC staff in conjunction with national team staff. Only in 2008 did the National Implementation Team take over sole training of clinical teams and foster carers, so all the original staff in the MTFC-A programmes received training from OSLC staff, although replacement staff may have been trained only by the national team.

In most cases, the foster carers recruited by the teams are not existing foster carers. Once they have completed the introductory training in fostering skills provided by the local authority they are formally assessed and approved by local fostering panels in the usual way. After this, they receive three days training in the MTFC model. Training manuals for the training of clinical teams and foster carers are provided by the OSLC.

Input on behaviour, communication and skills is delivered by the foster carers, programme supervisors, individual therapists and skills coaches. Indeed, the foster carers' use of the treatment foster care points and levels system, described above, is central to the work on behaviour. This work is closely supervised by the MTFC team, who monitor developments daily through the Parent Daily Report (PDR) calling system and who offer weekly group supervision to the foster carers. The PDR monitors the number of the child's problematic behaviours each day, which are logged in anonymised form on a website operated by the OSLC and accessible to the local team and the National Implementation Team. The PDR system facilitates the close tracking of young people's progress, allowing for difficulties to be quickly identified and for patterns to be monitored. Details are discussed weekly with the foster carers and the clinical teams, allowing the programme to be individually tailored to each child.

The Individual Therapists provide weekly individual therapy sessions, which include a focus on developing problem-solving skills and changing identified behaviours. Skills coaches help the young people to improve and practise their social skills and try to involve them in positive recreational activities. The MTFC teams aim to find appropriate education or training for young people, to help them settle into school and to encourage regular attendance. They try to systematically track the young people's behaviour at school and to encourage teachers to respond consistently and appropriately to them, sometimes acting as advocates for them within the school.

Where the plan is for young people to return home when the MTFC placement ends, birth family therapists work with parents to teach, and support them in practising, more effective parenting strategies with the young people. The aim is that the young people should continue to receive consistent parenting and improved parental supervision once they return home.

The wider policy and service contexts of England and the USA differ, making direct comparison of results of evaluations conducted in each country difficult. For example,

it is difficult to tell from published evaluations how the usual care services to which MTFC is compared in the USA, as well as the wider context of public services within which these are located, might compare to those in England. These are factors which are likely to have an impact on outcomes for young people in control groups, relative to outcomes for those receiving MTFC. The key question for this study, therefore, is: how do outcomes for young people placed in MTFC in England compare to outcomes for similar young people in alternative placements in foster or residential care.

Chapter 3 Methodology

3.1 Research aims

The Care Placement Evaluation (CaPE) was commissioned by the former DCSF (now the Department for Education) to explore the effectiveness of the MTFC intervention compared to the usual range of care placements. Commencing in 2005, the evaluation has tracked the first four years of the pilot MTFC programme for adolescents. The key aim of the evaluation was to explore whether this specialist intervention resulted in improved outcomes for young people compared to others in alternative care placements. Its principal research questions were:

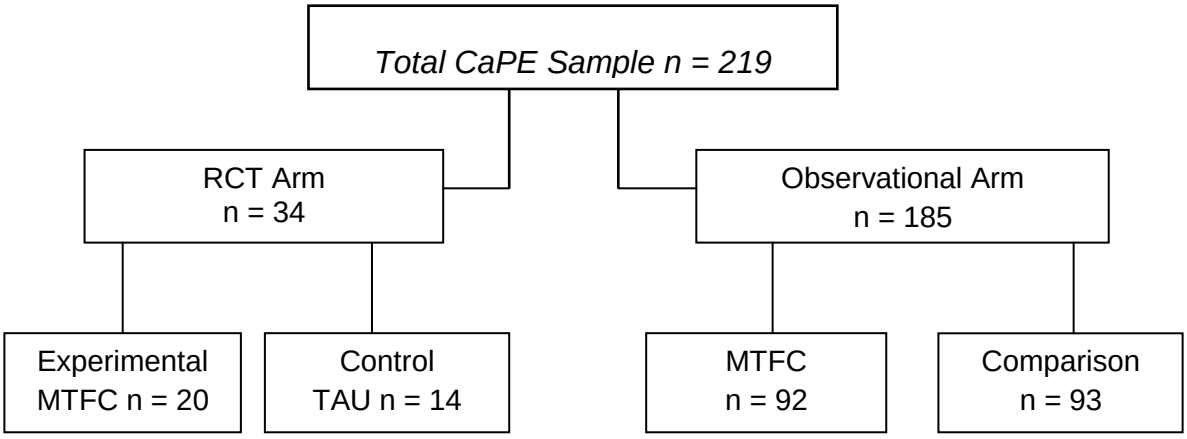
1. Does placement in MTFC result in enhanced outcomes for children compared to the usual range of care placements?
2. Which children, if any, are most likely to benefit from MTFC?
3. How do young people placed in MTFC view the intervention?

3.2 Research design

The evaluation used a two group pre-test post-test design with one-year follow-up. The evaluation compared outcomes for children offered MTFC with those for a group of similar children in the usually available placements in residential or foster care, that is, a Treatment As Usual (TAU) group. The study was designed as a randomised controlled trial (RCT), but in anticipation of the potential difficulties of using randomisation in all local authorities and in all individual cases for a study in the field of children's social care, the RCT was embedded within an observational study to ensure a sufficient sample should recruitment to the RCT prove problematic, as indeed it did. There were therefore two arms to the trial. Although we originally intended that the bulk of the enrolment would be into the RCT the observational arm eventually proved to be the larger, as shown in Figure 3.1.

An RCT is the design best able to control for the many variables (known and unknown) likely to affect outcomes. Whilst the RCT method is well established in health research it is relatively uncommon in social care research and therefore some reluctance or professional resistance from local authorities was anticipated. For this reason the trial was modelled and powered on the assumption that only eight of the authorities piloting the intervention would be willing or able to participate in the RCT. Although eight local authorities did eventually agree to participate in the RCT arm, most encountered difficulties in providing sufficient numbers of referrals to enable randomisation to take place. In all, therefore, only six local authorities successfully referred cases to the RCT arm of the trial, and in each the quantity of referrals was less than anticipated (as was also the case for the observational arm of the study).

Figure 3.1 Research design and sample



3.3 Timing and definitions

Data were collected at three points in time:

Time 1 (T1) Baseline data were collected in relation to the period *before* the baseline date, that is, before the children moved to their index placements in MTFC or alternative care.

Time 2 (T2) Data on placement process were collected around three months after baseline.

Time 3 (T3) Follow-up data were collected around 12 months after the children's baseline date.

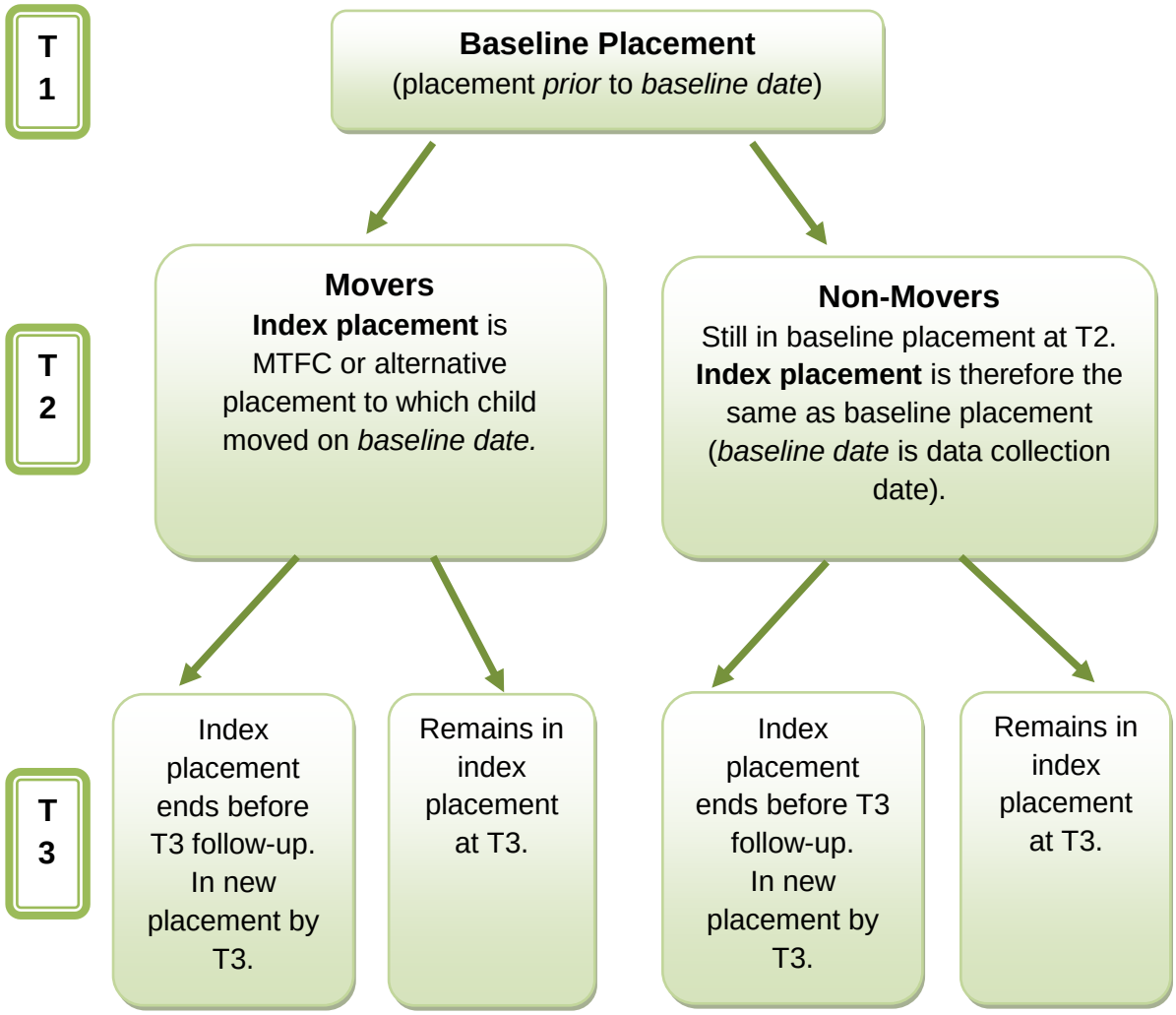
Baseline date (T1) The date on which the child moved to their index placement (for example, in MTFC). If the child did not in fact move as planned (a 'non-mover'), the baseline date was the point of baseline data collection.

Follow-up date (T3) The T3 follow-up date was one year after the baseline date.

Baseline placement The child's placement immediately prior to the index placement

Index placement The placement to which the child moved on the baseline date. If the child proved to be a 'non-mover', the index placement was the same as the baseline placement.

Figure 3.2 Placements for movers and non-movers



3.4 Measures

MTFC is a complex multi-faceted intervention which might impact on young people in a number of ways. To capture this, the choice was made to use standardised measures of global functioning for the primary outcome in the trial. Furthermore, the research team recognised in the design phase of the trial that information on young people's functioning would need to be gathered from a wide variety of sources and that the nature and complexity of these sources was likely to result in variable data completeness between cases as well variable data quality. For this reason, information was collected from multiple informants and sources, including postal questionnaires, face-to-face interviews, telephone interviews and reports and records (that is professional assessments and information relating to the child's health, education and care history) from social workers, MTFC teams and other professionals. The standardised Health of the Nation Outcome Scales for Children

and Adolescents (HoNOSCA) (Gowers, Harrington, Whitton*, et al.*, 1999) was used to synthesize these large quantities of data in a systematic manner allowing for variable completeness of information; and an outcome score made from this on the Children's Global Assessment Scale (CGAS) (Shaffer, Gould and Brasic, 1983).

HoNOSCA

HoNOSCA is a summary measure of mental health symptoms and social and physical functioning. Thirteen domains are rated on a five point scale of severity: disruptive, anti-social or aggressive behaviour, over activity, concentration or attention problems, non-accidental self-injury, problems with alcohol or substance misuse, scholastic or language difficulties, physical illness or disability problems, problems associated with hallucinations, delusions or unusual perceptions, non-organic somatic symptoms, emotional and related symptoms, peer relationships, self-care and independence, family life and relationships and poor school attendance.

CGAS

The Children's Global Assessment Scale (CGAS, (Shaffer, Gould and Brasic, 1983), a standard and widely used summary measure of general adaptive functioning, is derived from the Adult Global Assessment Scale (Endicott, Spitzer, Fleiss*, et al.*, 1976). It was designed to be used by clinicians based on multiple sources of information or a clinical interview. The informant is required to provide a single score which should reflect the young person's level of behavioural adjustment in functional terms rather than in terms of more specific psychiatric or behavioural symptoms (Kaplan, Labruna, Pelcovitz*, et al.*, 1999). Informants are instructed to take into account functioning in four major areas; at home, in school, with friends and during leisure time. Scores are then given on a scale of 10 deciles from 1 to 100, in which 1-10 represents extreme impairment, for example, a young person who requires constant supervision for safety, 51-60 represents moderate impairment with obvious problems, and a score of 91-100 represents superior functioning when the young person is considered to be doing very well. A set of anchor descriptors are provided for each decile in the scoring range, these are brief paragraphs which contain descriptions of functioning that is typical at each level of impairment (Winters, Collett and Myers, 2005). Once the informant has chosen a decile they are required to decide if the child is functioning within the upper, middle or lower range of the decile and finally select a score within that third to produce a single score (0-100).

The CGAS has been widely used within child mental health settings and epidemiological studies so that a large amount of norm data exists: it is widely accepted that scores below 60 distinguish clinical from non-clinical cases and scores above 70 are considered to be in the normal range (Kaplan, Labruna, Pelcovitz *et al.*,

1999; Horwitz, Owens and Simms, 2000; Green, Kroll, Imre*, et al.*, 2001; Jacobs and Green, 2004). The instrument has been found to have moderate to good inter-rater reliability, dependent upon setting; 0.53-0.63 in clinical practice and 0.83-0.91 in research (Shaffer, Gould and Brasic, 1983; Green, Shirk, Hanze*, et al.*, 1994), good test, re-test reliability (Shaffer, Gould and Brasic, 1983) and stability (Bird, Canino, Gould*, et al.*, 1987) It has good convergent validity: scores have been found to correlate with total problem scores from the CBCL, IQ, family dysfunction and suicide attempts, good discriminate validity: Psychiatric inpatients score significantly lower than outpatients, and predictive validity: low scores have been found to predict service use (Winters, Collett and Myers, 2005).

CBCL

One of the multi-informant forms of the Achenbach Scales were used in the study: the Child Behaviour Checklist (CBCL), which is the parent form for ages six to 18. These forms are designed to assess for a wide range of behavioural problems, competencies and psychopathology in young children and adolescents (Achenbach and Edelbrock, 1983). The CBCL has been used in studies of the psychological problems of children in care (Horan, Kang, Levine*, et al.*, 1993; Pilowsky, 1995; Armsden, Pecora, Payne*, et al.*, 2000; Heflinger, Simpkins and Combs-Orme, 2000) and was completed by foster carers and residential workers at baseline. These measures were used to score the HoNOSCA and CGAS.

SDQ

The Strengths and Difficulties Questionnaire (SDQ), is a validated screening measure of children and young people's emotional and behavioural difficulties (Goodman, 1997). We used the SDQ as a measure at baseline, as comparable data are available which allowed us to compare our sample to both the wider care population and to the population of young people in the wider community (Meltzer, Gatward, Goodman*, et al.*, 2000; Meltzer, Gatward, Goodman*, et al.*, 2003). The SDQ was completed by the baseline carer, however, due to limited response rates; data was not available for all cases, particularly for those already placed in MTFC at time of recruitment. For the MTFC group, therefore, SDQ data gathered by the national implementation team for the same time point was used to supplement the study data.

DAWBA AD

The *Development and Well-being Assessment – Attachment Disorder (DAWBA-AD)* is a questionnaire for parents or carers developed by Minnis *et al*. (unpublished

manuscript). It consists of 26 items about behaviours associated with the ICD-10 diagnosis of Attachment Disorder (AD) including the inhibited and disinhibited sub-types. Each item requires a rated response (true of the child a lot, a little, or not at all) (World Health Organisation, 1992). Items cover behaviour, such as over-friendliness and asking personal questions, the propensity to wander away from the carer, attention seeking, aggressive behaviour, clinginess, shallow relationships with adults, watchful vigilance and unpredictable behaviour on reunion. A further item requires an approximation of the age at which any identified behaviours started (if known). The final six items concern problems with social relationships and functioning which are considered to be a result of these behaviours. Responses for these items are scaled from 0, not interfered with functioning at all to 3, interfered a great deal. The instrument was developed based on the CAPA-RAD (see Minnis, Green, O'Connor*, et al.*, 2009 for supporting information), a semi-structured interview for use with parents and carers with items and probes which indicate the presence or absence of symptoms of RAD based on ICD-10 criteria. The CAPA-RAD has been found to discriminate 98 per cent of cases from controls and have good test re-test reliability (Cronbach alpha was .92) with a group of children aged five to eight years old. There are currently no standardised measures of attachment disorder in older children and adolescents thus age effects in this current study have been carefully considered. The scale used in the adapted DAWBA-RAD provides the potential for increased variance in scores and lowers the possibility of false-positive indication of RAD symptomatology with the inclusion of an intermediate score. The DAWBA-RAD was completed by carers as part of the carer postal questionnaire at T2 and at T3. The findings are discussed in Appendix 1.

Secondary outcome measures

Secondary outcome measures included the young person's care placement type, their engagement in education or training (including the type of education provision received) and evidence of any involvement in offending. These data were collected via questionnaires and telephone interviews with social workers, the MTFC team (where applicable) and carers at both baseline and follow-up.

3.5 Sample recruitment

The MTFC pilot programme was rolled out across 18 English local authorities in four separate rounds of implementation between 2004 and 2007. Recruitment of young people to the MTFC programmes began in 2004. Recruitment to the CaPE study began later in June 2005 and ended in December 2008. Many of the children who had already been placed in MTFC prior to the start of the evaluation were recruited to the study after these placements had begun. In addition, further young people who agreed to participate in the research after moving to their MTFC placement were

recruited retrospectively because delays in obtaining their consent, which had to be negotiated via their social workers, meant that their MTFC placements had already started before consent was secured It was therefore not possible to gather full baseline data for these cases, as discussed later in this chapter. Some of these children were still in their MTFC placements at the time they were recruited to the study (n=49) but others had already left (n=24).Overall, however, recruitment to the trial generally followed recruitment to the MTFC programme.

3.5.1 Eligibility for the study

Eligibility for the trial mirrored the eligibility criteria set out by the National Implementation Team for inclusion in the MTFC programme. Young people were eligible for MTFC if they were:

- Age 11–16 years *and*,
- In a placement which was unstable, at risk of breakdown or not meeting their assessed needs, or at risk of custody or secure care *and,*
- Showing complex or severe emotional difficulties and/or challenging behaviour.

A few local authorities operated enhanced or restricted inclusion criteria for their local programme, for example lowering the age range to 15 years or placing children under the age of 11 years, which was younger than the intended age range for the programme. It was also the intention that placements should be carefully planned, but in a few cases placements were made on an emergency basis. In addition, young people diagnosed with a moderate or severe learning difficulty might not be considered suitable for the programme, as it was necessary for those entering MTFC to understand and work within the programme's points and levels system.

Once a referral was made to the evaluation, the research team liaised with the relevant social worker to confirm the young person's eligibility and to arrange for an information leaflet on the study to be discussed with them. Recruitment to the RCT and observational arms of the study followed slightly different routes.

3.5.2 Recruitment to the RCT

In the RCT areas, young people considered suitable for MTFC were initially identified through consultation with placement panels/placement managers, MTFC teams and the children's social workers. Only once all concerned agreed that a young person met the eligibility criteria and could potentially be placed in MTFC were the young people themselves approached by the research team.

It was, of course, essential that social workers, young people and families fully understood the implications of randomisation to the young person's next placement. Also, again for ethical reasons, it was important that the children were not given the impression that the MTFC placement would necessarily be better than the alternative placements, to prevent any children *not* randomised to MTFC perceiving the process as a (further) experience of rejection. It was therefore necessary to employ a two-stage consent process. First the research team sought agreement to speak to the young person (directly or by telephone) to fully explain the random allocation process and second, the child's social worker or a Clinical Support Officer (CSO) provided by the Mental Health Research Network (MHRN) to assist with CaPE recruitment, asked the young person's consent to take part in the RCT arm of the study, using leaflets provided by the research team. It was not always possible for the research team themselves to approach young people face-to-face to request consent for either the RCT arm or the observational arm, as the team was too small to undertake this task across the 18 MTFC authorities.

During the initial telephone contact, researchers talked to the young people about the possibility of being offered a new type of foster care that was being introduced in their area, but explained that MTFC was just one placement option among other options that were being considered by their social workers. It was explained that as only a very small number of places in MTFC were currently available in their area, their local authority had agreed that these would be allocated on a random basis (for the purpose of research) and that if they wished to be considered for one of these, they would need to take part in the RCT. The implications of random allocation were fully discussed with young people and, for younger children and those in voluntary care, with their parents. Detailed information leaflets were produced to assist with this.

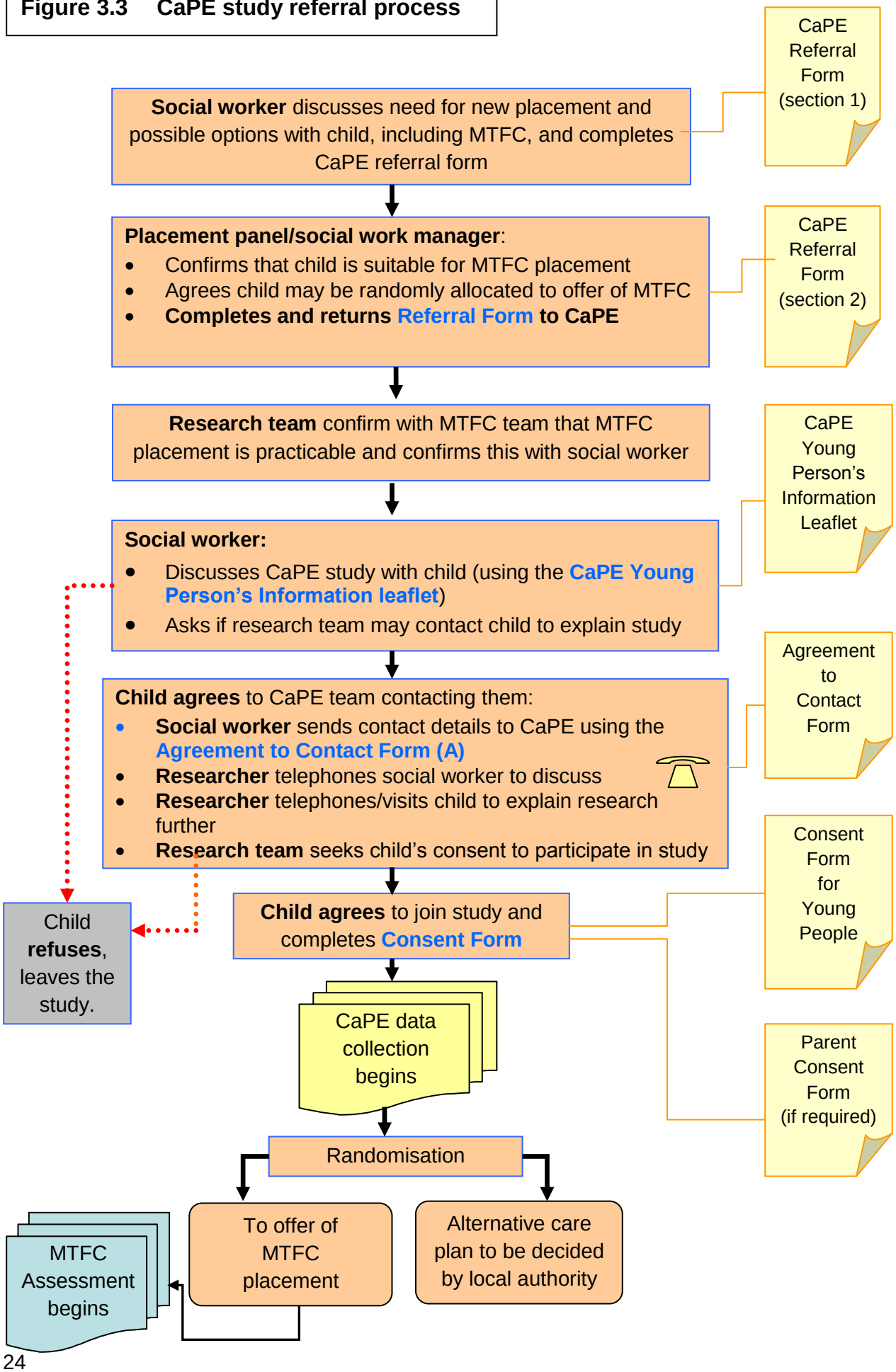
Those young people who subsequently agreed to participate in the RCT were randomly allocated to one of two options: an offer of an upcoming MTFC placement (experimental group) or an alternative placement that their social worker would find for them in the usual way (control group). Efforts to engage young people's interest in entering an MTFC placement were only made *after* randomisation had taken place, and only with those who had been randomised to an offer of MTFC. Only at this stage did the MTFC teams begin their full assessment.

Randomising young people to an *offer* of an MTFC placement rather than a specific MTFC placement was built into our RCT model to address certain practical problems which could arise from using this method for allocating placements in a social care setting. For example, for operational reasons the local authorities required a system that allowed vacancies to be quickly filled when they became available. Randomising to an offer of MTFC could effectively create a small waiting list of young people for the next suitable MTFC placement. This in turn could provide the opportunity for the MTFC team to match a young person and MTFC carer and to manage the timing of assessment, introductions and placement. In so doing, important aspects of social

work practice were not compromised by the RCT. Randomising to the waiting list could also allow for the possibility that a young person might refuse to take up an MTFC placement or be found, upon more detailed assessment, to be unsuitable for the MTFC programme. Having another suitable candidate on the waiting list could ensure that placements were not left empty. In practice however, the flow of referrals to the RCT were commonly too few to allow the 'wait list' system to operate in quite the way intended. Randomisation in practice was often made from a few as two available young people at the time.

Young people randomly allocated to the control group were placed in one of the usual placement options as decided by their social worker in the usual way. Young people from these local authorities who were unwilling or unable to be randomly allocated (for example, they refused or the local authority was unable to identify more than one suitable young person for an upcoming placement) were included in the observational arm, either as MTFC or comparison cases depending on the placement decision eventually made by the local authority. The recruitment process for the RCT is shown in Figure 3.3.

Figure 3.3 CaPE study referral process



3.5.3 Random allocation

Young people who consented to participate in the RCT were randomly allocated to an offer of MTFC or to the TAU control group. At total of 34 cases were included in the RCT arm of the trial, comprising 20 young people randomised to receive an offer of an MTFC placement and 14 to the control group (referred to as TAU in this section).

Remote randomisation by telephone was provided by the University of Manchester Biostatistics Group. At the planning stage of the study, concern was expressed that local authorities would be unwilling to randomise if some MTFC placement were left unfilled by randomisation. If a standard RCT randomisation had been used, there would have been the possibility that some MTFC placements would have been unfilled. To make randomisation more acceptable to participating local authorities a randomisation procedure was devised to minimize the number of unfilled MTFC placements.

Firstly, young people were not randomised in expectation of a placement. Randomisation only took place when at least one MTFC placement was available to be filled. In most instances randomisation took place when more than one young person was available to be randomised and the number of young people exceeded the number of available placements. Once details of the young person had been recorded, computer generated random numbers were used to allocate the available placements to the available young people. On four occasions only one young person was available to be randomised to the available place and so simple randomisation was used.

The effect of this method of randomisation is that the allocation ratio between MTFC and TAU varies according to the numbers of young people and the number of placements available for allocation at that time. This procedure is therefore sub-optimal compared to simple or block randomisation as the allocation ratio is not fixed and could in theory be manipulated by the investigators to influence the treatment allocation of a specific subject. It was nevertheless accepted as a necessary compromise to accommodate the concerns of local authorities.

3.5.4 Recruitment to the observational arm

All 18 local authorities piloting the MTFC intervention took part in the wider observational arm of the trial (including those who participated in the RCT and those who did not). In addition, due to difficulties in recruitment, five local authorities that were not part of the MTFC pilot programme were included to help boost the number in the comparison group, bringing the total number of local authorities taking part in the research to 23.

Recruitment to the observational arm of the study involved identifying those young people who were considered eligible for an MTFC placement by their local authorities according to the MTFC eligibility criteria outlined in section 3.5.1 above. This included young people who were being assessed for MTFC or placed in MTFC. It also involved a wider group of young people who met the overall criteria for MTFC but who could not be placed there due to the small size of the local pilot schemes or because they had refused the placement, or because MTFC was not available in their local area.

Whether young people in the observational arm joined the MTFC group or the comparison group for the study was determined by their local authority's decisions as to whether or not they were ultimately placed in MTFC. The considerations underlying these decisions about the placement of young people in MTFC varied between authorities. For example, though all operated the overall eligibility criteria for MTFC, some placed those young people most in need of an urgent placement, others placed young people considered more challenging whilst other opted to place less challenging young people. There was also evidence, as discussed later, that some local authorities 'earmarked' specific young people for an MTFC placement based on a range of factors, including whether they were currently placed out of area and cost.

Young people in the observational arm were identified through consultation with MTFC teams, social work teams, independent reviewing officers (IROs) and placement panels or managers. Once identified, social workers, MTFC teams and in some cases, carers, were asked to discuss information leaflets about the evaluation prepared by the research team with these young people and to ask them to consider giving their signed consent to the study.

It is important to note that, despite meeting the eligibility criteria for placement in MTFC at the recruitment stage, some young people in this group did not subsequently move to a new placement ('non-movers') either because of a lack of a suitable alternative placement or because their baseline placement had stabilised, so it was no longer in their best interests to move them.

Between June 2005 and December 2008, 523 cases were identified as meeting the criteria for MTFC and thus eligible for recruitment to the study. Of these, 42 per cent (219) joined the study. Over half (304) of the referrals to the trial did not take part in the study. Of the total referrals to the trial, 11 per cent (56) refused to participate in the study. Sixteen of these refusals had been placed in the MTFC programme (12 placements were ongoing and four had ended). A similar number (57) were excluded from the study because further discussions with their social workers and the MTFC team revealed that they were not in fact eligible for MTFC after all. For example, this could arise where, in the course of assessment by the MTFC teams, a young person was found to have a learning difficulty, as young people entering the programme

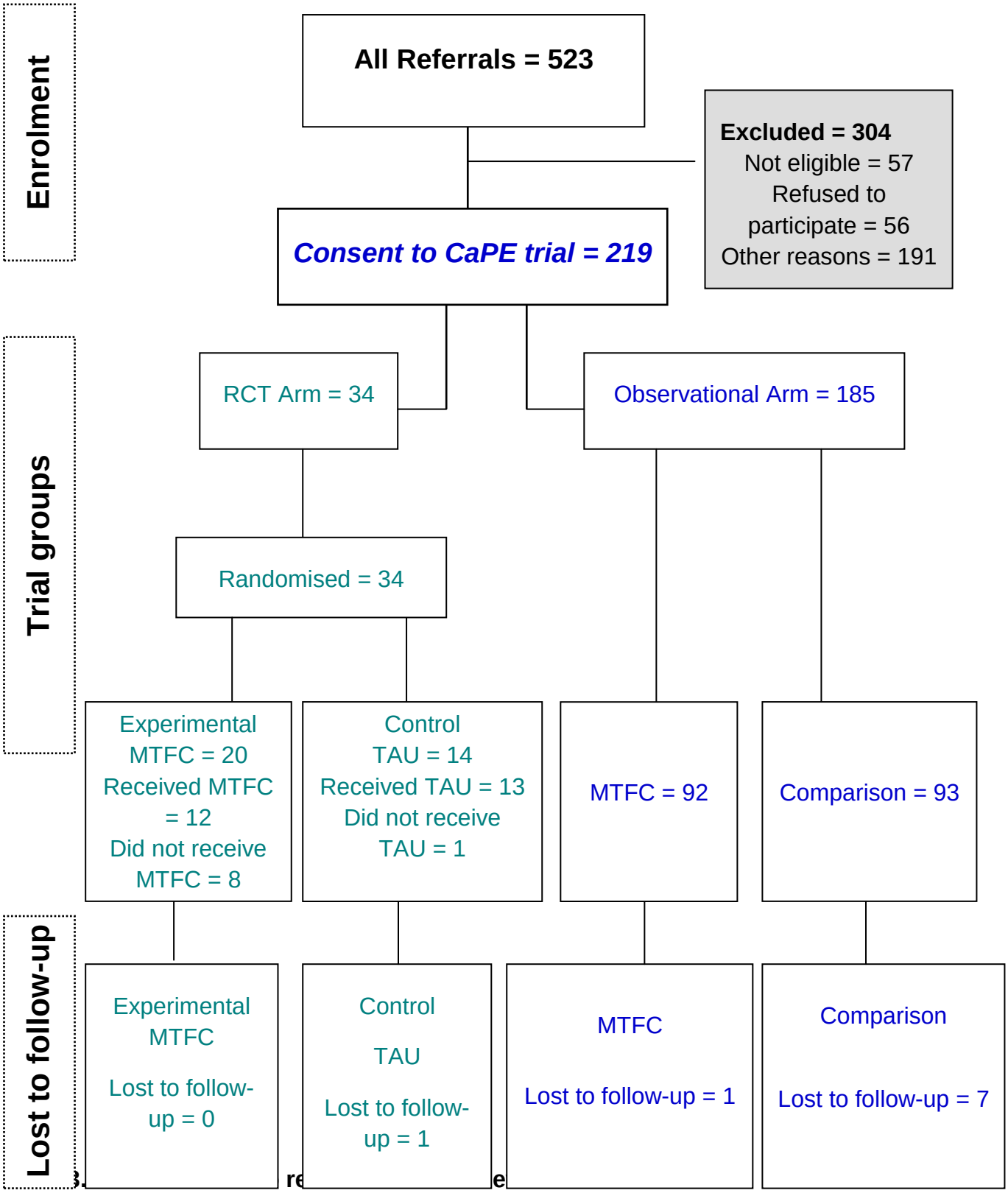
would need to fully understand and operate within the points and levels system. The presence of a moderate or severe learning difficulty could therefore preclude them from entering the programme The remaining 37 per cent (191) of initial referrals did not ultimately join the study due to difficulties in contacting them via the professionals working with them to obtain their consent, as discussed below.

3.5.5 The sample

The final baseline sample for the study of 219 young people included 104 young people across the two arms of the trial, who entered MTFC placements. These represented 63 per cent of the 166 young people who had been placed by the national MTFC programme for adolescents during approximately the same timeframe as CaPE recruitment.

Within the study sample, nine cases were ‘cross-over cases’. This included eight young people who were randomised to an offer of MTFC but did not ultimately enter an MTFC placement and one young person randomised to the TAU control group who subsequently moved to an MTFC placement. The high number of cross-over cases was due to local authority placement decisions post-randomisation. Outcomes in these ‘cross-over’ cases were analysed on an Intention To Treat (ITT) basis in our primary outcome analysis, as discussed below.
Figure 3.4 shows the flow of referrals through each arm of the trial, including the sample at baseline and follow-up.

Figure 3.4 Recruitment and sample attrition



3.5.6 Obstacles to recruitment to the evaluation

Our recruitment procedure for both arms of the trial relied on two key conditions: a good supply of MTFC placements available across the pilot local authorities and an open referral system for the MTFC programme within the authorities. In practice, however, few authorities met both of these conditions. First, as this was a pilot programme, the MTFC teams were still establishing themselves when the evaluation began and did not always have a full complement of staff or carers, or they had decided to begin with just one or two foster placements and then gradually expand. As outlined in Chapter 2, the DCSF recruited local authorities to the pilot programme in four waves over a number of years. As a result, throughout the recruitment period for the evaluation there were always a number of teams still in the start-up phase who were providing very few placements. For this reason, there was only a limited number of MTFC placements available and this hampered recruitment to the evaluation.

Furthermore, the availability and flow of placements was determined by the duration of an MTFC placement, which was intended to last around nine months before 'step-down' back to birth family or alternate care, and also by whether it ended sooner or later than planned. Problems with carer recruitment and carer turnover reduced the pool of potential placements and therefore potential recruits to the study even further. These factors restricted the number of cases that could be recruited to the total MTFC group. Given these recruitment difficulties, young people who had been placed prior to the start of evaluation were recruited retrospectively in order to increase the size of the MTFC group in the observational sample.

Second, rather than operating an open referral policy for the MTFC programme where social workers might refer any eligible child for consideration, most authorities operated a restricted referral procedure, where particular young people were 'earmarked' by senior managers for an upcoming MTFC place. This restricted the flow of referrals to the overall study and, in particular, resulted in very few potential members of a comparison group being actively referred to the study. To boost the comparison group, the research team enlisted the help of IROs who were able to generate anonymised lists of young people matching the MTFC criteria but who had not been referred to the MTFC programme. Consent to participate in the comparison group was therefore sought from these young people via their social workers.

The restricted referral practices operated by LAs also hampered the recruitment to the RCT arm, which initially relied on at least two referrals for each upcoming MTFC placement. In some cases local authorities were unable to identify enough suitable young people for the programme which effectively rendered an RCT unfeasible. Although we liaised closely with managers, social workers and MTFC teams to promote improved recruitment to the study, we essentially had no control over referrals to MTFC. These difficulties derived from our role as *independent* evaluators.

Evaluations by programme developers or implementation teams may be somewhat less likely to encounter difficulties of this kind, but their relative advantage in terms of recruitment to studies must be weighed against a relative lack of independence.

Over one-third (191) of young people referred to the study did not take part due to difficulties in tracing and/or contacting them to request consent. In most cases this resulted from gatekeeping on behalf of the social worker or, in some cases, the MTFC teams. We could not discuss participation in the study with young people and parents without the co-operation of social workers since, quite properly, initial approaches to looked after children in England must be made via the professionals working with them. The reluctance of many social workers to discuss the study with young people made it very difficult to obtain their consent. In a number of cases many months passed without the research leaflets having been discussed with the young people, despite repeated requests and reminders, by which time some had settled into new placements and were no longer eligible for the study. These problems affected recruitment to the observational sample as well as the RCT sample.

Obstructing access to a research sample is a common obstacle in research with vulnerable groups, particularly where the nature of the research necessitates contact at a difficult time, such as in the present case during a placement move. Social workers, and often MTFC teams, expressed a reluctance to seek consent from a young person whilst they were preparing them for a new placement. The competing demands on hard-pressed social workers often meant that discussing a research leaflet with a young person was not a priority for them. The majority (72 per cent) of the 191 young people we were unable to approach for consent were those we wished to recruit to our comparison group.

Despite these obstacles, CaPE represents a significant step forward in introducing RCT methodology into research on children's social work services in the UK. This is in part due to the commitment of a small number of local authorities and individuals who were willing to engage with such an innovative approach. As we had anticipated, recruitment to the RCT arm of the trial proved extremely difficult, mainly due to the reluctance or inability of many local authorities to participate in the RCT or of social work staff to propose young people for inclusion in this arm of the trial. RCTs are extremely unusual in UK studies of social work with children. Other RCTs of interventions in UK children's services in recent years, which were studies of the effectiveness of training programmes for foster carers or adoptive parents, have encountered similar difficulties with gatekeeping and recruitment (Minnis, Pelosi, Knapp*, et al.*, 2001; Rushton and Monck, 2009).

3.5.7 Sample attrition

As indicated in Figure 3.4, sample attrition for the trial was very low. Only one (three per cent) of the young people in the RCT arm and eight (four per cent) of those in the observational arm were lost to follow-up, giving a total attrition rate of only four per cent. This low attrition rate was achieved because data were collected from four sources at follow-up, so key data were available from at least one source (and usually more than one) for the majority of the sample (as outlined later in Table 3.2).

3.6 The research sites

All MTFC authorities were obliged to take part in the evaluation as part of their contract with the DCSF (n=18). Five additional non-MTFC authorities were recruited during the final year of sample recruitment specifically to increase the size of the comparison group. The distribution of participants across the 23 local authorities ranged from two to 23. Six authorities provided cases for the RCT and the remaining 17 participated only in the observational arm of the trial[1]. The left-hand column of Table 3.1 shows the numbers randomised to MTFC plus those recruited to the MTFC group in the observational sample, while the right-hand column shows the numbers randomised to TAU plus those recruited to the comparison group within the observational sample.

[1] Two young people in Tower Hamlets were randomised to MTFC but never placed: they are included in the experimental group for our intention to treat analysis of the RCT sample, but in the analysis of the total sample they were included in the 'never placed in MTFC' group. One young person in the Wirral was placed by that authority's MTFC team shortly after they left the national pilot programme.

Table 3.1 Sample recruitment by local authority n=219*

Local authority	*Randomised to MTFC + MTFC group in observational sample*	*Randomised to control group+ comparison group*	*Total*
Dorset	8	1	9
Durham	3	10	13
Solihull	8	1	9
The Wirral	13	10	23
Wandsworth*(6)	6	6	12
Cheshire	2	0	2
Dudley	9	5	14
Kent	11	5	16
Southampton	4	2	6
Gateshead*(3)	6	5	11
Hammersmith and Fulham* (5)	4	5	9
Northumberland and North Tyneside	5	10	15
North Yorkshire	8	2	10
Reading	6	3	9
South Gloucester	6	13	19
Tower Hamlets*(7)	5	3	8
Trafford*(7)	5	8	13
Salford*(6)	3	3	6
Non-MTFC Authorities (5)	0	15	15
Total	112	107	219

* Authorities participating in the RCT arm of the trial with total cases contributed to RCT in brackets.

3.7 Data collection

Quantitative and qualitative data were collected at three points in time from a range of different sources including case files, social workers, carers, young people, reports and records and, for MTFC cases, the MTFC team. The timing of data collection and definitions of the baseline and index placements have been outlined above (see section 3.3). All postal questionnaires and interviews included a mix of closed questions, for quantitative analysis, and open-ended questions designed for qualitative analysis.

3.7.1 Stages of data collection

Baseline (T1)

Data collection at baseline for the most part focused on the young person's behaviour and experiences prior to the baseline date. Data were collected from up to four sources:

- *Young people:* a brief telephone interview was carried out with young people to gather information on their views of their baseline placement (that is, the placement prior to their move to the index placement) and schooling, and their wishes, expectations and motivation in relation to moving to a new placement. Telephone interviews were conducted at this point as resources did not permit the conduct of face-to-face interviews at both baseline and follow-up with young people who were scattered across the whole country. Although these brief telephone interviews gathered some data on young people's views, their essential purpose was to establish personal contact with them and explain that we would like to visit them in a year's time.

- *Baseline carers:* postal questionnaires were sent to the foster carers or residential key workers in the young people's baseline placements, which asked them to describe and sometimes rate the young person's health, education, difficulties and emotional and behavioural difficulties. They were asked to complete two of the standardised measures describes earlier, the Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1997) and the Child Behaviour Check List (CBCL) (Achenbach T and Edelbrock, 1983).

- *Social workers:* postal questionnaires were also sent to the young people's social workers. These focused on the young person's background and care history, including reasons for entering care, experience of abuse and neglect, number of placement moves. Information was also gathered on health, education, difficulties and emotional and behavioural difficulties and on the baseline placement. In cases where the full social worker questionnaire was not returned, a brief pro forma gathering essential information (for example, placement history and characteristics) was completed either via a telephone interview with the social worker or from reports and records.

- *Reports and records*: case file reports on mental and physical health, education and care history were scrutinised for all cases for the six months prior to the baseline date. This information was used both to supplement the general baseline data collection and to contribute to the data used for the researcher rating of the two primary outcomes measures at baseline, the HoNOSCA (Gowers et al 1998) and the CGAS measure (Shaffer *et al*., 1983).

T2

A second round of data collection was conducted six to 12 weeks after the move to the 'index' placement or, for the non-movers, three months after the baseline date as described above. Data on the index placements were collected via:

- *MTFC teams or social workers*: Postal questionnaires were sent either to MTFC teams *(*where young people had entered MTFC placements) or to social workers (for those in alternative placements). The main body of these questionnaires was identical, but those for MTFC teams included a supplementary section which gathered information on the operation of the local MTFC team and on the team's assessment of the young person's carer.

- *Index carers:* telephone interviews with foster and residential carers included questions on the nature of the index placement and the interventions it provided, the young person's emotional and behavioural difficulties, how well the young person had settled and any difficulties with the placement. A measure of attachment (the DAWBA-RAD) was included. MTFC carers were asked additional questions on their experience of training and support from the MTFC team.

Follow-up (T3)

At follow-up, 12 months after the baseline date, the measures administered at T1 and T2 were repeated (with the exception of the SDQ). Additional information on the young people's experiences, progress and receipt of services over the follow-up year was also gathered from up to four sources:

- *Young people:* face-to-face semi-structured interviews were undertaken with young people. These focused on their experiences over the past year, including their views on the index placement and any subsequent placements and any support they had received with educational, behavioural or other difficulties.

- *Follow-up or index carers:* where young people had remained in the same placement between T2 and T3, this was the same carer who had completed the earlier T2 questionnaire. In the small number of cases where young people had returned home, an adapted version of the carer questionnaire was completed by parents. Questionnaires explored how the young person was doing in their current placement and in education or training, collected information on any recent emotional and behavioural difficulties and included the CBCL and DAWBA-RAD measures.

- *Social workers, MTFC teams or other care professionals:* follow-up questionnaires were sent either to social workers, MTFC teams (if young people

were still in their MTFC placements) or other care professional with responsibility for the young person (for example, for young people who had left care at age 16 or over, their leaving care personal advisor). As with T1, a key data pro forma was completed for those cases where essential information had not been provided by the social worker or MTFC worker.

- *Reports and records:* these were collected at T3 for a proportion of cases for whom only limited data were available at T3 follow-up time-point (for example, where it had only been possible to collect data from a single source).

The multiple potential sources of data at each stage of the evaluation maximised the opportunity for obtaining key information at each time-point and thus reduced the effects of low response rates from some sources.

3.7.2 Response rates

Response rates for the sample at each stage of data collection are shown in Table 3.2.

Table 3.2 Questionnaires and interviews completed n (per cent)

	Total Sample	*Total MTFC**	*Total TAU comparison*
Data collection for the sample	219	112	107
T1 young person	148 (68)	57 (51)	91 (85)
T1 carer	111 (51)	41 (37)	69 (64)
T1 social worker	133 (61)	50 (45)	83 (76)
Reports and records	212 (97)	112 (100)	100 (93)
T1 key data	*81 (37)*	*62 (55)*	*19 (18)*
T2 carer	115 (53)	63 (56)	52 (49)
T2 social worker/MTFC	134 (61)	66 (59)	68 (64)
T3 young person	175 (80)	93 (83)	82 (77)
T3 carer/parent	164 (75)	88 (79)	76 (71)
T3 social worker/MTFC	168 (77)	93 (83)	75 (70)
T3 reports and records	41 (19)	26 (23)	15 (14)
T3 key data	*33 (15)*	*19 (17)*	*14 (13)*

* MTFC group in observational sample plus young people randomised to MTFC.

Data were collected from fewer respondents at baseline than at follow-up due to the delays in obtaining consent described above, which meant that in some cases it was too late to collect time-sensitive baseline data (e.g. on our measures). However, other data on the young people's characteristics, histories and circumstances were nevertheless collected from one or more sources at baseline, including from social work, education and health agency reports and records.

3.7.3 Rating the HoNOSCA and C-GAS

A systematic two stage process was used to complete the HoNOSCA, which also allowed researcher ratings of this primary outcome blinded to intervention allocation – a major strength of the method. Firstly, relevant information for each HoNOSCA domain was extracted according to protocol rules from the multi-informant sources (questionnaires, including the CBCL and YSR, and reports and records) and transcribed onto a domain rating form by a researcher (the 'transcriber'). This transcriber made an initial rating of the transcription according to the standardised HoNOSCA procedure. Then a second researcher independently rated this transcription blind to other case data. This process allowed estimates of inter-rater reliability in rating as well as preserving the blind rating of the second researcher in the process. For cases where there was a discrepancy between raters of 10 points or more, a blind rating was done by a third rater and the median score used. In order to ensure the validity of ratings, the HoNOSCA transcriptions were only completed when information was available from more than one data source, for example, a questionnaire completed by a social worker and an interview with the young person or an agency report.

As a final stage in the HoNOSCA process, both transcriber and blinded rater made a further outcome score on the Children's Global Assessment Scale (CGAS). Inter-rater agreement was excellent for the C-GAS at both T1 (ICC = .75, 95 per cent CI = .68 - .80) and T3 (ICC = .81, 95 per cent CI = .75 - .85). Agreement for the individual HoNOSCA scales ranged from average for a minority of scales to excellent at T1 and T3 (see Table A3.1 in Appendix 3 for all inter-rater statistics).

3.8 Data analysis

3.8.1 Analysis of quantitative data

Statistical analyses of the primary outcome were carried out using Stata Release 11 (StataCorp. 2009. Statistical Software: Release 11.0. College Station, TX: Stata Corporation). All other statistical analyses used the software package PASW 18. Bivariate analyses, mainly using non-parametric tests, and multivariate analysis (both linear and logistic regression) were used to compare the groups at baseline and

follow-up. The results of the statistical tests carried out are detailed in footnotes throughout the report.

3.8.2 Constructed variables

Total scores for HoNOSCA at baseline (T1) and follow-up (T3) were computed using the pro-rating methodology in which values for missing scale items are imputed with the mean of other items prior to calculating a total score for the scale. This procedure was used provided at least half of the scale items were not missing for a subject. If more than half of the scale items were missing, the total score for that subject was set to missing.

3.8.3 Planned analysis of primary outcomes for the RCT sample

Statistical analysis of RCT sample (that is, the randomised cohort) was by the intention-to-treat (ITT) principle subject to the availability of outcome data. In this subjects are analysed according to the intervention group they are allocated to rather than the intervention they receive. Analysis dependent on received treatment is known to have a potential for bias. The benefit of MTFC as compared to TAU at T3 was estimated using an analysis of covariance adjusting for the T1 value of the outcome (either CGAS or HoNOSCA) and other key baseline variables that showed group difference.

3.8.4 Planned analysis of primary outcomes for the observational sample

In the observational sample (that is, the non-randomised cohort) there was evidence that subjects who received MTFC differed considerably from those who did not. In order to adjust for this imbalance the propensity score method of analysis was used. These analyses aim to achieve a better balance between groups through analysis of factors that influence treatment received prior to examination of outcome data, sometime called the design stage (Rubin, 2007). The procedure used was as follows:

(i) For the non-randomised cohort logistic regression models were fitted to the binary variable “Receipt of MTFC” with the following covariates gender, age at T1, foster care placement prior to T1, CGAS score at T1, HoNOSCA at T1 and the constructed variable Troubled[2]. Such models are sometimes called the *propensity score* model.

[2] Troubled’ is a summary measure created in order to overcome difficulties with missing data. It was created using component analysis of measures taken from the carer, young person, social worker and reports and records related to general behaviour and well-being.

(ii) The predicted probability of receiving MTFC was calculated for each subject in the cohort. Following standard practice all variables were used when determining the normalised propensity score and probability of receipt of MTFC for each subject regardless of statistical significance as non-significant variables may improve the prediction.

(iii) Subjects with probabilities of receiving MTFC above 90 per cent or below 10 per cent were trimmed from the data set as these can distort the analyses increasing the size of standard errors.

(iv) The propensity score models in (i) were refitted on the trimmed dataset and probability of receiving MTFC calculated.

(v) Inverse probability weights were then calculated. These weights are calculated for each subject according to their characteristics by taking the inverse of the predicted probability of their assigned treatment.

(vi) Weighted analyses corresponding to those for the randomised cohort were carried out applying the inverse probability weights to the data. This is analogous to the use of weights in survey data. Subjects with a high probability of receiving their assigned treatment are down weighted in the analysis and subjects with a low probability up weighted so improving the balance between samples.

The data from the randomised cohort were not included in the propensity analysis as they are balanced by randomisation.

3.8.5 Sub-group analysis

In addition to the planned analysis of the effect of MTFC subgroup analyses were carried out, for example, to test for any differential treatment effect between subjects classified as high on the anti-social subscale of the HoNOSCA at T1 and those rated low on this scale.

3.9 Analysis of qualitative data and case studies

Two types of qualitative analysis were undertaken. First, we conducted a simple thematic analysis of qualitative data on the total sample, collected from a range of sources. Second, we conducted a more in-depth case study analysis of both qualitative and quantitative data on a purposive sub-sample of young people placed in MTFC.

3.9.1 Analysis of qualitative data on the total sample

We conducted a simple thematic analysis of a large body of qualitative data on the total sample. Qualitative data were collected during telephone interviews with 148

young people and 115 carers, in 175 face-to-face interviews with young people at follow-up and from open-ended questions included in all postal questionnaires. No previous studies of MTFC have included qualitative interviews with young people on the programme.

A coding framework was developed, with some themes determined in advance and others emerging from an initial pilot analysis of a sub-set of interviews. The coding framework for interviews with young people included: young people's wishes; their expectations of the new placement; their accounts of the reasons for past placement instability; perceptions of their new placements; specifically, their perceptions of MTFC (did it help? why/why not?); views of specific help received e.g. with behaviour, skills or education; perceptions of current relationships with carers and with family members. The coding framework for interviews with carers included: views of MTFC training and support; views of the operation and value of the MTFC programme; views as to what helped or hindered success in work with the young people. Answers to open-ended questions on survey questionnaires were also coded thematically.

3.9.2 Case studies

A purposive sub-sample of 20 young people who received MTFC was selected for case study analysis. The purpose of the case study analysis was to explore the reasons why some young people did well on the MTFC programme while others did not appear to benefit greatly from it. It was not our aim to identify a representative sample for these case studies, as this would have necessitated a sample far too large for in-depth analysis. Instead, we wished to select a range of young people with different characteristics and different degrees of engagement with the programme.

The primary criteria for the selection of this sample were a balanced gender distribution, a spread of ages and local authorities and the availability of a comprehensive qualitative and quantitative dataset on the young person. A minimum requirement was that a follow-up interview had been completed with the young person, but a reasonable range of baseline and other follow-up data were also necessary. Sixty per cent of the young people selected were male, they came from 13 different authorities and their ages were evenly spread between 11 and 15 years. In order to compare young people who appeared to have engaged with the MTFC programme with those whose placements disrupted, we also ensured that the case study sample included a mix of late and early leavers. The national implementation team's programme audit distinguished between early leavers, who left within three months, and those who remained on the programme for three months or more, for whom they anticipated that there would be a treatment effect. Three-quarters of those selected had remained in their MTFC placement for six months or more while for one-quarter, placements had disrupted within three months.

We also wished to use the case study analysis to explore the hypothesis, derived from our quantitative analyses, that anti-social young people may benefit more from MTFC than non anti-social young people. Just over half (11) of the young people selected for the case studies had been rated as anti-social at baseline. Once this number of criteria had been taken into account, the number of possible cases for inclusion was small and there were few choices to be made. Final decisions were made on the basis of the range of data available on each young person

Analysis comprised a qualitative analysis of interviews with young people and carers and close scrutiny of all questionnaires and agency reports available on the young people. We also examined their C-GAS scores at baseline and any change in these by follow-up. Our aim, in this analysis, was to draw on multiple sources and types of data to explore how, why and in what circumstances young people benefit, or fail to benefit, from MTFC. Our analyses therefore explored child and family histories, care pathways and young people's accounts of their experience of MTFC. In our narrative analysis of the young people's accounts we aimed to understand both the ways they made sense of their placement in MTFC and to situate their accounts in the wider context of information provided by professionals. These illustrative case studies therefore represent an attempt to explore young people's progress, or lack of progress, in MTFC in greater depth.

3.10 Summary

The Care Placement Evaluation (CaPE) was commissioned by the former DCSF to track the first four rounds of the pilot MTFC programme for Adolescents to explore the effectiveness of the MTFC intervention compared to the usual range of care placements for troubled young people.

The evaluation involved an RCT embedded within a case control study. Eighteen MTFC local authorities participated in the evaluation, six of which took part in the RCT. Two hundred and nineteen young people participated in the evaluation, of whom 34 joined the RCT arm of the study and 185 entered the observational arm.

The evaluation encountered some obstacles to recruiting a sample, both to the RCT and the overall CaPE study. Local referral and placement procedures, gatekeeping and reluctance to engage with the RCT were evident.

The RCT sample included nine cross over cases (eight who were randomised to MTFC but who did not subsequently take up a place, and one who was randomised to treatment as usual but who was then placed in MTFC).

Nine young people were lost to follow-up representing a very low (four per cent) attrition.
The study employed a mixed methods approach including bivariate and multivariate statistical analysis as well as qualitative analysis. Statistical analysis of the RCT sample was carried out on an intention to treat (ITT) basis. Analysis of the observational sample employed propensity score matching to adjust for differences between the MTFC and comparison groups.

The primary outcome measures for the study were the HoNOSCA and the CGAS. Additional measures used included the Strengths and Difficulties Questionnaire (SDQ), Child Behaviour Checklist (CBCL), both measures of emotional and behavioural difficulties, and the DAWBA-RAD, a measure of attachment. Secondary outcome measures included placement type, engagement in education and involvement in offending at baseline and follow-up.

RCT's are relatively uncommon in social science research. CaPE therefore represents an important step in the development of methodological approaches to research into children's social work services in the UK.

Section 2: The Young People at Baseline

Chapter 4 Characteristics and Circumstances

The next four chapters compare the characteristics, circumstances, histories and emotional and behavioural difficulties of the young people in the MTFC group with those for the comparison group of young people who received the 'treatment as usual' (TAU), the majority of whom lived in residential placements or other types of foster placement during our follow-up period.

One purpose of these comparisons is to establish the extent to which the MTFC and TAU group were well-matched. Since the RCT and Observational study samples were generated in different ways, we planned for these two samples to be considered separately for some aspects of description and data analysis, while combining them (as the total CaPE sample) for other purposes. For clarity therefore, we will use the following terminology throughout the report and ask the reader to be alert to these differences in what follows:

Table 4.1 Terminology used for study samples

Cohort type	*Label used for sample*	*MTFC group*	*TAU* (Comparison) group*
Observational arm	Observational sample	MTFC group	Comparison group
RCT arm	RCT sample	Experimental group	Control group
Combined total sample	Total CaPE sample	Total MTFC group	Total Comparison (TAU) group

* TAU group and comparison group are used interchangeably.

4.1 The sample

The total sample comprised 219 young people, of whom 34 were in the RCT sample and 185 in the observational sample.

Table 4.2 shows group allocation for the RCT sample. This is based on the group the young person was randomised to, not the service they actually received.

Table 4.2 RCT sample n=34

Experimental group (randomized to MTFC)	*Control group (randomized to TAU*	*Total RCT sample*
20	14	34

However, there were nine crossover cases in the RCT sample, eight of which were randomised to MTFC but did not receive it, while one was randomised to the control group but instead received MTFC, as outlined in Chapter 3. For the analysis of the total CaPE sample, therefore, the eight young people randomised to MTFC but never placed were included in the TAU group, and the young person randomised to TAU but instead placed in MTFC was included in the MTFC group. The number of young people who actually received either MTFC or TAU in each sample is shown in Table 4.3.

Table 4.3 Placement groups of total CaPE sample at baseline n=219

Sample	*MTFC group (placed in MTFC)*	*Comparison group (placed in TAU)*	*Total CaPE sample*
Observational sample	92	93	185
RCT sample	13	21	34
Total CaPE sample	105	114	219

4.2 Demographic characteristics

4.2.1 Age

The MTFC-A programme was targeted at children and young people in the age-range 11-16 years. Official statistics show that children in the (slightly broader) 10-15 year age range constitute 41 per cent of the population looked after at any point in time and 36 per cent of new entrants to care (DCSF, 2009). The ages of the total sample ranged from seven to 17 years, with a mean age of 13.06 years. Eighteen young people in the study were outside the target age-range reflecting the practice of some local authorities of placing younger children in MTFC. The programme was not designed for under 11 year olds, but since some local authorities placed younger children it was adapted for use with them. There was little difference in the mean ages of the RCT sample (12.7 years) and the observational sample (13 years). Ninety-five per cent were between10 and16 years old.

For the RCT sample there was no significant difference in age distribution between the experimental and control groups. The two groups in the observational sample were not well matched on age, however. The comparison group was significantly older, with a mean age of 14 years, compared to12.3 years for the MTFC group[3]. Seventy per cent of the MTFC group were age 13 years or under, compared to just 32 per cent of the comparison group. This difference will be taken into account in our analysis of outcomes.

[3] Mean age of comparison group = 14 yrs. (SD=1.7) compared to 12.3 years (SD=1.9); for the MTFC group, t (183) =-6.51, p=<0.001.

Table 4.4 Age groups of observational sample n (per cent) n=185

Age	*MTFC group*	*Comparison group*	*Total*
Under 11 years	18 (20)	3 (3)	21 (11)
11-13 years	46 (50)	27 (29)	73 (39)
14-15 years	27 (29)	45 (48)	73 (39)
16 -17 years	1 (1)	18 (19)	18 (10)
Total	92 (50)	93 (50)	185 (100)

One of the reasons for the imbalance was that certain areas chose to place younger children in MTFC than had been initially proposed. Eight children under 10 years old were placed in MTFC, all of whom came from just two authorities. There were no under 10 year olds in the comparison group and very few who were only 10 years old at baseline, but there were substantially more 16-17 year olds in this group than in the MTFC group.

4.2.2 Gender

Like the looked after population as a whole, the total CaPE sample included a slightly higher proportion of males (54 per cent) than females. The proportion of males was higher within the MTFC group than the comparison group (TAU); both for the RCT sample (65 per cent) and the observational sample (58 per cent), but these differences between the groups were not statistically significant for either sample or for the sample as a whole. Table 4.4 shows the gender distribution within each group for the CaPE sample as a whole.

Table 4.5 Gender by group for total CaPE sample n (per cent) n=219

Sex	*Total MTFC group*	*Total TAU group*	*Total*
Male	60 (57)	59 (52)	119 (54)
Female	45 (43)	55 (48)	100 (46)
Total	105 (100)	114 (100)	219 (100)

Overall, the girls in the total CaPE sample were older than the boys (a mean age of 13.5 years compared to 12.7 years). This difference was significant for the MTFC group, within which the girls were on average nearly one year older than the boys (12.8 years compared to 11.9 years for the boys). However, within the TAU group the girls were only slightly older than the boys and there was no significant difference in age[4].

[4] Chi-square test significant at p=.01 for the MTFC group. The mean ages of the comparison group were 14 years for girls and 13.7 years for boys.

4.2.3 Ethnic origin

The groups were well-matched in relation to ethnic origin. The proportion of children who were white (88 per cent) was higher than for the English care population as a whole (76 per cent), possibly reflecting the demographics of the authorities participating in the MTFC pilot programme (DCSF, 2009). The largest sub-group of non-white children were those of mixed ethnic origin (nine per cent), a similar proportion to that for the wider care population (eight per cent).

Table 4.6 Ethnic origin by sample and by group n (per cent) n=214

Ethnic origin	*Observational sample (n=180)*		*RCT sample (n=34)*		Total CaPE sample (n=214)
	MTFC group	Comparison group	Experimental group	Control group	
White	81 (93)	84 (90)	14 (70)	9 (64)	188 (88)
Black	2 (2)	0	2 (10)	1 (7)	5 (2)
Asian	0	2 (2)	0	0	2 (1)
Mixed	4 (5)	7 (8)	4 (20)	4 (29)	19 (9)
Origin					
Total	87 (100)	93 (100)	20 (100)	14 (100)	214 (100)

The RCT sample included a higher proportion of young people from black and minority ethnic (BME) groups (32 per cent) than the observational sample (eight per cent). This difference between the samples derives from the self-selection of authorities into the randomised controlled trial. Young people from three inner London boroughs, each with relatively large BME populations, accounted for over half of the RCT sample. All but one of the young people from BME groups in the RCT sample came from these three London authorities.

4.3 Health problems and disabilities

The groups were generally well-matched in terms of the proportions with health problems, disabilities and special needs. Social workers and carers indicated that 30 per cent of the sample had a disability, sensory impairment or chronic health condition. The proportion with these complex needs was slightly higher within the observational sample than in the RCT sample.

Table 4.7 Disabilities or chronic health problems n (per cent) n=205

Nature of disability	*Observational sample (n=171)*	*RCT sample (n=34)*	*Total sample n=205*
Physical disability/Sensory impairment	11 (6)	2 (6)	13 (6)
Learning disability	24 (14)	4 (13)	28 (14)
Chronic health problems	8 (5)	1 (3)	9 (4)
Other diagnosed difficulties	8 (5)	1 (3)	9 (4)
Total with disability or health difficulties	51 (30)	8 (24)	29 (62)

The proportion of 14 per cent with learning difficulties was similar to that for young people participating in the national MTFC-A pilot programme, of whom 15 per cent have been assessed as having learning disabilities, so in this respect our sample reflects the population who have entered the English MTFC programme (National Implementation Team, 2008). There were no significant differences in the proportions with these difficulties between the MTFC and comparison groups in either sample.

Given the disabilities of many of the young people (and the mental health difficulties discussed in Chapter 6), it is not surprising that over half of the total CaPE sample had a statement of special educational needs. However, this proportion is nearly double that of 28 per cent among all children in England who looked after for at least one year (Department for Children Schools and Families, 2009). Within both samples, young people in the MTFC group were more likely to have a statement of special educational needs, but the difference was not statistically significant.

Table 4.8 Proportion with statement of SEN n (per cent) n=213

	Observational sample (n=179)	*RCT sample (n=34)*	*Total CaPE sample (n=213)*
Statement of SEN	93 (52)	21 (64)	114 (54)

4.4 Placement at baseline

Over half (53 per cent) of the young people were in residential care at baseline. This proportion roughly five times higher than that for the English care population as a whole, of whom 10 per cent are in residential care at any point in time (DCSF 2009). Nearly half of the young people living in residential settings at baseline were in costly private or voluntary sector placements, residential schools or secure units.

Table 4.9 Baseline placement of CaPE total sample n (per cent) n=219

Placement type	*Total CaPE sample*
Foster Care (mainstream)	81 (37)
Foster care (specialist)	9 (4)
Residential care (local authority)	61 (28)
Residential care (out of authority/other)	41 (18)
Residential school	6 (3)
Secure unit	9 (4)
With parents or relatives	8 (4)
Other	4 (2)

The high use of residential care may be partly explained by the age of the population targeted by the MTFC-Adolescents programme, as residential care is for the most part used for children age 11 years or over (Sinclair, Baker, Lee*, et al.*, 2007). It was also due to the targeting of this MTFC intervention, which was aimed at precisely the group most often to be found in residential care in England, namely older children with challenging behaviour who have had multiple placement disruptions. The proportion in foster care (41 per cent) was correspondingly lower than the proportion for the English care population as a whole (73 per cent), and this is also likely to be due to the age and placement history of this sample. Just over one in 10 of the fostered children were living in specialist foster placements.

There is considerable variation in the use of residential care by English local authorities, due to differences in local placement policies and resources. This local variation was evident for our sample, as the percentage living in residential placements at baseline varied considerably by local authority. For example, in one authority none of the six young people who received MTFC moved there from residential care, whereas in another, seven of the nine young people who received MTFC moved there from residential homes. These differences are likely to be the result of variations in local policies on both the targeting of the MTFC intervention and the use of residential care. For example, some authorities tried to reduce the size of their residential care populations by identifying children in residential care who might benefit from MTFC. Due to the large number of authorities participating in the study relative to our sample size it was not possible to test this local variation statistically.

Older children were more likely to be in residential care than younger children, with 71 per cent of those aged 14 years and over in residential placements compared to 43 per cent of 11 to 13 year olds[5]. The proportion of under 10 year olds in residential placements at baseline was remarkably high, at 46 per cent, perhaps reflecting the very serious difficulties of these children. It seems unlikely that the high proportion of under -10 year olds in residential settings was due to local policy variation, as these 11 children came from nine different authorities. There were no gender differences in the use of residential care. Perhaps surprisingly, placement in residential care rather than foster care was not associated with the number of previous placement changes.

Among children in the RCT sample, there was no difference in the likelihood of being in a residential or foster placement at baseline. Seventy per cent of the experimental group and 71 per cent of the control group were in residential placements. However, within the observational sample, those in the MTFC group were significantly more likely to be living in foster care at baseline and the comparison group were correspondingly more likely to be living in residential care, as shown in Table 4.9[6].

[5] Mann-Whitney U test significant at p=.001.
[6] Chi-square test significant at p=.048. Children in other types of baseline placement were excluded from this analysis.

Table 4.10 Baseline placement of observational sample n (per cent) n=185

Placement type	*MTFC group*	*Comparison group*	*Observational sample*
Foster care	47 (51)	33 (36)	80 (43)
Residential care	39 (35)	56 (61)	95 (51)
Other placements	6 (5)	4 (3)	10(5)

4.5 Education prior to baseline

4.5.1 School placement

In the three months prior to baseline, only 45 per cent of the sample had been in mainstream education, although 10 of these young people (five per cent) were educated in special learning support units within mainstream schools.

Table 4.11 Educational placement of total CaPE sample n (per cent) n=201

	Total MTFC group n=103	*Total TAU group n=98*	*Total CaPE sample*
Mainstream	52 (51)	39 (40)	91 (45)
Special school (day)	17 (16)	13 (13)	30 (15)
Education on premises of a residential unit	9 (9)	11 (11)	20 (10)
Pupil referral unit or home tuition	12 (12)	16 (16)	28 (14)
FE college	5 (5)	14 (14)	19 (9)
No education	8 (7)	5 (5)	13 (7)

The seriousness of the young people's educational difficulties was reflected in the fact that over half of them were receiving specialist education, often on a part-time basis, or no education at all. Specialist education in the community was either provided by special schools for children with behavioural, emotional or social difficulties or took the form of part-time provision in pupil referral units or through home tuition. The other main alternative to mainstream education was schooling within residential units including children's homes (five per cent), secure units (four per cent) or residential special schools (three per cent). Seven per cent of the children were of compulsory school age but had been receiving no education at all. This group included two children who refused all educational provision.

Within the observational sample, children in the MTFC group were significantly more likely to be in mainstream education at baseline (52 per cent) than those in the comparison group (35 per cent)[7]. There were no differences in this respect between the groups in the RCT sample.

[7] Chi-square test significant at p=.031, n=171.

4.5.2 School attendance

A substantial minority of the total CaPE sample were to some extent disengaged from school, as 29 per cent were reported to have absented themselves either occasionally or frequently during the three months prior to baseline.

Table 4.12 School attendance: CaPE total sample n (per cent) (n=173)

	Total MTFC group (n=90)	*Total TAU group (n=83)*	*Total*
Mostly attends	70 (79)	52 (63)	122 (71)
Occasional non-attendance	9 (10)	19 (23)	28 (16)
Frequent non-attendance	11 (12)	12 (15)	23 (13)

Older children were more likely to truant than younger children. There was a marked rise in proportion truanting from the age of 13 years. Frequent non-attendance was reported for 22 per cent of those aged 14-15 years[8]. There was no association between gender and patterns of school attendance.

Within the observational sample, young people in the MTFC group were significantly more likely to have been attending school regularly prior to entering their MTFC placement (82 per cent) than those in the comparison group (65 per cent). There was little difference in the proportion of frequent non-attenders, but a far higher proportion of the comparison group truanted 'occasionally' than the MTFC group (21 per cent of the comparison group compared to seven per cent of the MTFC group)[9]. Within the RCT sample the attendance of the control group also appeared to be slightly poorer than that of the experimental group but the numbers were too small to explore the significance of this.

4.5.3 Exclusion from school

Patterns of exclusion from school provide further evidence of detachment from education for many of the young people. Information on either temporary or permanent exclusion was available for 171 children (78 per cent of the total CaPE sample). Problems with missing data on this variable made it difficult to estimate the number excluded from school accurately, but the data available nevertheless suggest that rates of exclusion were high[10]. During the three months prior to baseline, 59 per cent of the young people were known to have been excluded from school either

[8] Chi-square test significant at p<.001.
[9] Chi-square test significant at p=.033.
[10] Data on exclusion were available for only two-thirds of the observational sample n=124. Missing data on this variable appeared to be because the question was left blank when there had been no exclusions. We have therefore assumed that on returned questionnaires, missing data on this variable meant no exclusions.

temporarily or permanently. In seven cases young people had first been temporarily excluded during this period and subsequently permanently excluded.

Table 4.13 School exclusion: total CaPE sample n (per cent)

	Total MTFC group	*Total TAU group*	*Total CaPE sample*
Temporary exclusion n=149	34 (51)	32 (39)	66 (44)
Permanent exclusion n=152	12 (19)	11 (13)	23 (15)

There was no indication of any difference between groups for either the observational or the RCT sample.

One in eight children (28) appeared to be particularly detached from school, as they had both truanted from school in the previous three months and had been excluded (in most cases temporarily). Nearly three-quarters of this group were living in residential placements.

4.5.4 Young people's views of education

During our initial telephone interviews, the young people were asked to indicate the extent to which they agreed with a list of statements in relation to schooling. Just under two-thirds (141) of them completed this measure, so our data on this can only suggest the pattern for the wider sample[11].

Table 4.14 Views of school: total CaPE sample n (per cent) (n=144)

	Yes	*No*
Likes school	99 (70)	42 (30)
Likes learning	112 (78)	32 (22)
Is sometimes bullied	50 (38)	91 (62)
Would like help with reading and writing	50 (38)	91 (62)

[11] In most cases the young people were interviewed at baseline, but in some cases we were unable to contact them until after they had moved to their index placement (details have been given in Chapter 3). The responses of all young people with whom baseline interviews were conducted are included here, irrespective of the timing of these interviews.

Nearly one-third said that they did not like school, of whom one-quarter said they were bullied and one-third said they would like help with reading and writing. Children in the 11-13 year age range were more likely to say they liked school and that they would like help with reading or writing. There was no difference between the MTFC and TAU groups in attitudes to education, once age was taken into account.

4.6 Summary

The age of the sample ranged from seven to 17 years, with a mean age of 12.7 for RCT sample and 13 years for the observational sample. Within the observational sample, children in the MTFC group were significantly younger (mean age 12.3 years) than those in the comparison group (14 years). This difference will be taken into account in our analysis of outcomes. There was no age difference in the RCT sample.

Just over half (54 per cent) of the total CaPE sample were male. Within the MTFC group girls were nearly one year older, on average, than boys. The majority (88 per cent) were White. Among those from BME groups, most were of mixed ethnic origin.

Fourteen per cent were reported to have learning disabilities and six per cent had a physical disability or sensory impairment. Over half of the total sample had a statement of special educational needs.

The proportion living in residential placements at baseline was nearly six times higher, at 58 per cent, than the proportion for the English care population as a whole. This is likely to be due to the targeting of the intervention. Nearly one-fifth of the children were living in costly out of authority placements. Within the observational sample, children in the comparison group were more likely to be living in residential care at baseline than those in the MTFC group, whereas there was no difference in the RCT sample.

Only 45 per cent of the young people were in mainstream education at baseline. Within the observational sample, children in the comparison group were less likely to be in an ordinary school (35 per cent) than those in the MTFC group (52 per cent), and were also significantly more likely to have truanted during the three months prior to baseline. Over half (59 per cent) of the children in the total sample had been temporarily excluded from school during this period.

Chapter 5 The Young People's Histories

The chapter describes the reasons for the children's entry to care, their experiences of maltreatment and other aspects of parenting prior to entry and their care histories.

5.1 Experience of abuse and neglect

Although only half of the total CaPE sample were reported to have been admitted to care or accommodation for reasons of abuse or neglect, the vast majority had experienced maltreatment.

Table 5.1 Abuse and neglect in total CaPE sample n=219

Type of maltreatment	*Number*	*Per cent*
Sexual abuse	88	40
Physical abuse	121	55
Emotional abuse	176	80
Neglect	161	74
Any form of maltreatment	203	93

Data on the nature of the maltreatment indicated that emotional abuse was the most common form, followed by neglect. Physical abuse had been experienced by over half of the sample whilst four in 10 young people had been victims of sexual abuse. The proportions with experience of emotional abuse or neglect were not dissimilar to those for children in a recent study of maltreated children in care (Wade, Biehal, Farrelly*, et al.*, 2011). This found that 85 per cent had experienced emotional abuse and 84 per cent had experienced neglect, although physical abuse was reported for a somewhat higher proportion of children (55 per cent) than in this study. However, the proportion known to have been sexually abused was 20 per cent in the study by Wade and colleagues, which was half that for the current sample. Our sample therefore included a particularly high proportion of children with experience of sexual abuse.

There was generally no statistically significant difference in the type of maltreatment experienced by girls and boys in the sample, with the exception of sexual abuse. Consistent with previous research, sexual abuse was more prevalent amongst girls (57 per cent of girls compared to 26 per cent of boys, $p < .001$) (Howe, 2005). There was also some indication that physical abuse was more commonly suffered by boys (21 per cent) than girls (12 per cent)[12].

[12] Chi-square sex by sexual abuse significant at p<.001; sex by physical abuse did not quite reach significance p=.06.

There were no significant differences in the nature of the maltreatment between the experimental and control groups in the RCT sample. Within the observational sample, the MTFC group were significantly more likely to have experienced physical abuse and marginally more likely to be known to have suffered any form of maltreatment[13].

Table 5.2 Abuse and neglect in observational sample n (per cent) n=185

Abuse and neglect	*MTFC group (n=92)*	*Comparison group (n=93)*	*Total observational sample (n=185)*	*Significance p*
Physical abuse	65 (71)	40 (43)	105 (57)	<.001
Emotional abuse	76 (83)	72 (77)	148(80)	ns
Sexual abuse	40 (44)	39 (42)	79 (43)	ns
Neglect	71 (77)	63 (68)	134 (72)	ns
Any abuse/neglect	89 (97)	83 (89)	172 (93)	.042

The majority (81 per cent) of the children in our total sample had experienced multiple forms of maltreatment, with over half (53 per cent) having experienced three or four forms of maltreatment during the course of their lives. These proportions were similar to those found in the study of maltreated children in care mentioned above (Wade, Biehal, Farrelly *et al.*, 2011).

Although emotional abuse may occur alone, all types of maltreatment are likely to involve some level emotional abuse (Howe, 2005; National Collaborating Centre for Women's and Children's Health, 2009). In particular, emotional abuse and neglect frequently co-occur, and this was true for the children in our study (Stevenson, 1996; Wade, Biehal, Farrelly *et al.*, 2011). The majority of children in the total CaPE sample (88 per cent) known to have experienced neglect were also reported to have experienced emotional abuse. Other forms of abuse were often accompanied by neglect, as 85 per cent of physically abused children and 80 per cent of sexually abused children had also experienced neglect. There was also some overlap between physical and sexual abuse, as sexual abuse was reported in relation to half of the physically abused children.

Within the observational sample, children in the MTFC group were likely to have experienced more forms of maltreatment than the comparison group. Nearly two-thirds (63 per cent) of them had experienced three or four forms of maltreatment compared to less than half (46 per cent) of the comparison group[14]. The proportion in the comparison group not reported to have experienced maltreatment was also somewhat higher (11 per cent, 10 children) than in the MTFC group (three per cent, three children). Within the RCT sample, a higher proportion of the experimental group had experienced maltreatment of any kind (95 per cent compared to 86 per

[13] Chi-square tests.
[14] Mann-Whitney U Exact Test p=.018.

cent of the control group) and had experienced three or more forms of maltreatment (50 per cent compared to 43 per of the control group), but these differences were not statistically significant.

Information on the age at which maltreatment was first reported was available for 82 percent (178) of the total CaPE sample and suggested that for just over half (52 per cent) of these, abuse or neglect had started in the pre-school years. A proxy measure of the duration of maltreatment prior to first entry to care suggested that the length of exposure to abuse or neglect averaged around five years for the sample[15].

5.2 Parenting

Social workers were asked to rate a set of statements on the parenting style of the young people's parents over the past six months. We only received this data on just under half (48 per cent) of the total CaPE sample. In most cases missing data were due to the non-completion of questionnaires by social workers[16]. The small number for whom we have data on this issue means that we should be cautious about extrapolating from these findings to the whole group, but they nevertheless provide a useful indication of the nature of parenting likely to have been experienced by many in the sample.

Table 5.3 Parenting style for total CaPE sample (per cent) n=105

Statement	*Most of the time*	*Sometimes*	*Hardly ever/never*
Parent generally warm towards child	44	39	17
Parent sets clear boundaries	8	38	54
Parental supervision consistent	7	33	60
Parent communicates/shows interest in child	29	51	20
Parent is harsh towards child	13	48	39
Parent is rejecting towards child	19	53	27

[15] Social workers were asked to indicate the age-band in which maltreatment was first suspected to have occurred (for example, five to nine years). The minimum level of the age-band (for example, five) was subtracted from the age at which the child was first looked after to give a proxy indicator of length of exposure to maltreatment.

[16] In 80 per cent of cases where these questions were not answered, missing data were due to non-completion of social worker questionnaires. Where social workers did return a questionnaire but did not answer these questions, in 82 per cent of cases the child had been in care for several years so the current worker may have felt unable to answer these questions, or may not have seen them as relevant at this stage. It is also possible that some of these children were no longer in regular contact with parents. Where we have these questionnaires in the observational arm, the questions have been answered for 27/36 (75 per cent) of the MTFC group and 57/75 (76 per cent) of the controls. Therefore, there is no reason to believe that there is a bias between the groups caused by missing data.

Poor supervision and a failure to set clear boundaries were the most commonly reported parenting problems. Since MTFC is designed to provide clear boundaries and supervision, it appears that the intervention was appropriately targeted. Less than half of the parents were thought to be warm towards the child most of the time, and in nearly one-fifth of cases they were reported to be rejecting most of the time. The data available, albeit on only half of the total sample, therefore indicate that around one-fifth of the children had experienced rejecting and often harsh parenting prior to admission to care.

In the observational sample, the MTFC group and the comparison group were similar on all types of parenting style reported. Data on parenting style were only available for 22 of the RCT group and so the numbers were too small to test for any significant differences between the groups.

Social workers were also asked whether a set of statements was true in relation to a number of possible parental difficulties likely to have an impact on children's well-being. These data were obtained only where a full social work questionnaire was completed at baseline and were only available on around one-third of the total sample. The most common parental difficulties reported are shown in Table 5.4.

Table 5.4 Parental difficulties reported by social workers: total CaPE sample (n=70-78)

	Number	*Valid per cent*	*Per cent of total sample n=219*
Parent has mental health problems n=70	38	54	17
Parent has been involved in criminal activity n=71	34	48	16
Parent current/recent drug/alcohol misuse n=76	39	51	18
Young person has witnessed domestic violence n=78	66	85	30

Domestic violence was the parental difficulty most commonly experienced by these children, as 85 percent of the group for whom these data were available had witnessed domestic violence. Domestic violence was particularly common among parents with problems of substance misuse. Almost all (94 per cent) of the children whose parents were reported to abuse drugs or alcohol were known to have witnessed domestic violence. In addition, most (89 per cent) parents reported to

abuse substances had also been involved in criminal activity[17]. Among the small group of children in the observational sample for whom these data were available (n=60), those in the MTFC group were significantly more likely to have parents with reported mental health problems than those in the comparison group (76 per cent compared to 29 per cent)[18].

Although the children in our sample appear more likely to have experienced sexual abuse than another recent sample of maltreated children in care, in other respects their pre-care histories were not dissimilar to those of other maltreated children. Not only is the co-occurrence of different forms of maltreatment quite common (Howe, 2005; Stevenson, 2007), but these are often interwoven with a complex range of quite deep-seated family difficulties. It is the interaction of these multiple adversities that may increase the risk of poor outcomes for children (Rutter, Giller and Hagell, 1998; Rutter, 2000). Parental substance misuse, domestic violence and violent offences have been found to cluster together in families and to be strongly associated with maltreatment (Glaser, Prior and Lynch, 2001; Cleaver, Nicholson, Tarr*, et al.*, 2007).

Multiple adversities of these kinds may reduce the likelihood that children will return home to their families. A recent English study of nearly 4,000 children looked after due to abuse or neglect found that children were significantly less likely to return home where there was evidence of substance misuse or domestic violence in their families. If they did return home in these circumstances they were less likely to remain there than maltreated children whose parents did not have these problems (Wade, Biehal, Farrelly *et al.*, 2011). Research in the USA has also found that children are less likely to be reunified with substance abusing parents than with those not known to abuse drugs or alcohol (Rzepnicki, Schuerman and Johnson, 1997). A number of studies in both England and the United States have also found that children who enter care due to neglect, as 44 percent of our sample did, are less likely to be reunified with their parents than those admitted for reasons of abuse (Biehal, 2006; Biehal, 2007; Wade, Biehal, Farrelly *et al.*, 2011). We shall return to these issues when examining placements at one year follow-up.

[17] Chi-square tests substance abuse by domestic violence p=.036; substance abuse by criminal activity p<.001.

[18] Chi-square test significant at p<.001. This question was answered for 34 of the MTFC group and 54 of the Comparison group in the observational sample. However, social workers for the comparison group were more likely to answer 'don't know'. Where they answered 'don't know', it may be more likely the parent does not have the problem in question, which may have resulted in a slight over-estimate of the problem, particularly for the Comparison group. Data on parental problems were only available for 11 young people in the RCT sample so numbers were too small for comparison.

5.3 Reasons for entry to care

Social workers were asked to indicate the main reasons for the young person's entry to care or accommodation (in relation to their last admission, if they had entered on more than one occasion). In most cases multiple reasons were reported. There were no significant differences in reasons for admission between the MTFC group and comparison group for either the observational or the RCT sample.

Table 5.5 Reasons for last entry to care: total CaPE sample n (per cent) n=214

Reasons for entering care	*Contributed to admission*
Parents unable to provide care	122 (59)
Young person's behaviour	88 (43)
Neglect	90 (44)
Relationship breakdown	74 (36)
Actual abuse	58 (28)
Potential abuse	51 (25)
Other	18 (9)

For half (49 per cent) of the total sample, reasons for entry had included abuse and/or neglect[19], slightly lower than the proportion looked after for this reason in England as a whole, which has been around 62 per cent in recent years (DCSF, 2009). The proportion admitted directly due to maltreatment was perhaps lower for this sample because it included a number of adolescent entrants to care, and adolescent entrants are less commonly admitted for reasons of abuse or neglect than younger children (Sinclair, Baker, Lee *et al.*, 2007). Nevertheless, many adolescents admitted for other reasons have experienced abuse or neglect, even if this is not the principal reason for admission at the point of entry to care (Triseliotis, Borland, Hill*, et al.*, 1995; Packman and Hall, 1998; Farmer, Moyers and Lipscombe, 2004; Biehal, 2005). As we have seen, this was clearly true for our sample.

Concerns about the young people's behaviour had contributed to the admission in 43 per cent of cases. Other studies have found that experience of physical abuse is often associated with behaviour problems in children (Manly, Cicchetti and Barnett, 1994; Cicchetti and Toth, 1995). In our sample, two-thirds of those young people whose behaviour had contributed to the admission had been physically abused and

[19] The proportion rises to 59 per cent if entry due to potential abuse is included.

41 per cent had been sexually abused. Neglect may also be associated with a range of negative emotional and behavioural outcomes. A recent review of the research on neglected adolescents has highlighted the links between neglect and anti-social behaviour, running away, bullying, poor educational engagement and achievement, poor mental health and risky health behaviours (Stein *et al*., 2009).

The most commonly reported factor contributing to the admission was parents' inability to care, but it was extremely rare for this to be the sole reason for admission. In over two-thirds (69 per cent) of such cases concerns about actual or potential abuse, or neglect, had also contributed to the admission. In 46 per cent of these cases concerns about the child's behaviour had also contributed, and in over one-third of cases where parents were unable to provide care there had been a breakdown in parent-child relationships. Other reasons for young people coming into care included the death of a parent (four cases), parents receiving a custodial sentence, parent or child's physical or mental health difficulties and rejection by family.

5.4 Care history

5.4.1 Time in care

Over two-thirds (68 per cent) of the total CaPE sample had been continuously looked after for one year or more prior to baseline, a minority of whom (17 per cent of the total sample) had been in care for more than six years.

Nearly one-third (32 per cent) were therefore relatively new entrants to care who had become looked after only in the previous year. However, almost half of these recent entrants had experienced previous episodes of care. Adolescent entrants to care constitute a sizeable minority of all admissions to care in England. Over one-third of new admissions nationally are 10-15 years old, the age range for most of our sample (DCSF, 2009). Previous research has shown that older entrants to care tend to have greater difficulties, to find it more difficult to settle and to experience greater instability than those entering earlier in childhood (Dixon, Wade, Byford*, et al.*, 2006).

There was no difference between MTFC and comparison groups in relation to time in care, either within the observational or the RCT sample.

5.4.2 Age at first admission

The mean age at first admission to care for the sample as a whole was 8.7 years. Many had entered care for the first time in middle childhood or adolescence, as shown in Table 5.6.

Table 5.6 Age at first entry to care for total CaPE sample n=219

Age in years	*Number*	*Per cent*
Under 1 year	9	4
1-4	25	11
5-9	75	34
10-15	97	44
Missing	*13*	*6*

Among the care population in England as a whole, new entrants to care in any one year include a much higher proportion of infants under one year old (19 per cent) and also a much higher proportion of children entering under the age of five years (38 per cent) than was evident for our sample (DCSF, 2009). Our data therefore suggest that many of our sample had first entered care relatively late. Only four per cent had first entered care before the age of one year, and only 15 per cent had done so before they were five years old. The majority may therefore have been exposed to adversity in their home environments for several years prior to their first admission to care.

Within our observational sample, young people in the MTFC group had first entered care at a significantly younger age, on average, than those in the comparison group, as shown in Table 5.7[20].

Table 5.7 Age at first entry to care for observational sample n=176

Years	*MTFC group*	*Comparison group*	*Observational sample*
Mean age	8.3	9.5	8.9
Mode	10	13	11

5.4.3 Number of care episodes

Information on the total number of admissions to care or accommodation was available for 86 per cent (188) of the CaPE total sample. This indicated that over half (56 per cent) had entered care on only occasion and had since remained continuously looked after. However, 31 per cent had experienced two to four care

[20] Mann-Whitney U test significant at p=.019.There was no evidence of any significant difference in age at entry to care for the RCT sample.

episodes and 13 per cent (23 children) had entered care five or more times. This suggests that for a substantial minority of the sample, several attempts at reunification had been made. Two recent studies have found that reunified children who subsequently return to care have been found to have poorer outcomes, in terms of well-being and stability, than those who remain continuously in care or whose reunification with parents is stable (Sinclair, Baker, Lee *et al.*, 2007; Wade, Biehal, Farrelly *et al.*, 2011).

There were no significant differences in the number of care episodes experienced by the MTFC and comparison groups for either the observational or the RCT sample.

5.4.4 Placement stability prior to baseline

Many children had experienced a great deal of placement instability during the course of their lives. This was not unexpected, since MTFC is specifically targeted at children with complex needs who have had chequered care careers marked by placement instability. Information on the number of previous care placements for our sample was gathered from social worker questionnaires and, where these were not returned, through scrutiny of reports and records on the children. Where possible, these data were also cross-checked with the MTFC national implementation team. Data on the total number of past placements were available for 70 per cent of the sample.

The total number of care placements ranged from zero (for two children living at home at baseline) to 28, with a mean of 5.33 placements. There were no significant differences in the total number of placements between the groups in either the observational or the RCT sample.

Table 5.8 Total number of placements since first entry to care: total CaPE sample n (per cent) n=153

Number of placements	*Number (valid per cent)*
0	2 (1)
1	19 (12)
2-3	43 (28)
4-6	48 (31)
7-10	29 (19)
12-28	12 (8)
Mean number of placements	*5.33*

The most common number of placements experienced was three (18 per cent of the children), but nearly one-third had lived in four to six placements and three children had lived in 26-28 placements. Girls were more likely to have experienced a high number of placement moves, with 58 per cent of girls having had a total of five or more placement moves, compared to 42 per cent of boys[21].

There was also a correlation between the number of placements and the age at which the child had first become looked after, but there was no correlation with the child's current age. Children who had first entered care at a younger age tended to have lived in more placements than those admitted later in their lives, and girls had also lived in more placements than boys. Unsurprisingly, those who had experienced more admissions to care during their lives, punctuated by unsuccessful reunions with their families, had lived in more placements[22].

We also investigated the number of placements in the twelve-month period prior to baseline, which ranged from 0-16. For the sample as a whole the mean number of placements during this year was 2.43. The number of placements during this period was not associated with age, sex or the age at which children had first entered care. Although the MTFC and comparison groups in our observational sample were well-matched in terms of the total number of placements they had ever experienced, this was not the case in relation to the number of placements they had lived in during the year prior to baseline. The comparison group appeared to have been generally more settled, as two-thirds of them had just one placement in the year prior to baseline whereas only one-third of the MTFC group had one or no placements in this period[23]. However, data on placements during this period were only available for just over one-third of the comparison group, who may not have been representative of the entire group. Within the RCT sample, there were no significant differences either in the number of placements ever or in the number of placements in the past 12 months.

[21] Mann-Whitney-U test significant at p=.004.
[22] Pearson correlations (a) total number of placements by age first looked after -.254, p=.002 (b) total number of placements by number of care episodes .347, p<.001. Girls had lived in 6.24 placements, on average, compared to 5.1 for boys (Mann-Whitney U test significant at p=.004). Once age at first entry and gender were taken into account in a linear regression, with total number of placements as the dependent variable, current age (p=.04), age at first entry (p<.001) and gender (p=.016) were all significant. There was no association between age at first entry and gender.
[23] Mann-Whitney U test significant at p=.007.

Table 5.9 Number of placements in the last 12 months: total CaPE sample n (per cent) n= 121

Number of placements	*MTFC group n=84*	*Comparison group n=37*
0	5 (6)	0
1	23 (27)	24 (65)
2-3	30 (36)	10 (27)
4-5	15 (18)	2 (5)
6-9	11 (13)	0
16	0	1 (3)
Mean number of placements	*2.74*	*2.00*

Older children and adolescents are particularly likely to experience placement instability. Studies have indicated that for adolescents in foster care, around 40 per cent of new placements disrupt within the first year of placement (Berridge and Cleaver, 1987; Farmer, Moyers and Lipscombe, 2004; Biehal, 2009). Children with emotional and behavioural difficulties are also at greater risk of placement disruption (Schofield, Beek, Sargent*, et al.*, 2000; Farmer, Moyers and Lipscombe, 2004; Sinclair, Baker, Wilson*, et al.*, 2005; Wilson, Sinclair, Taylor*, et al.*, 2005; Biehal, Ellison, Baker*, et al.*, 2010). However, child difficulty may not be the only reason for placement instability. Stability may also be influenced by carers' life events or parenting style and by system factors, such as professional decisions about individual children and resources (Berridge and Cleaver, 1987; Sallnas, Vinnerljung and Westermark, 2004; Biehal, Ellison, Baker *et al.*, 2010).

Placement instability is generally considered to have a negative influence on children's well-being. However, placement stability should not be the sole indicator of success, as some children may remain unhappily in poor quality placements. It is important to distinguish between placement disruptions and planned moves, which may be beneficial for the child.

5.4.5 Legal status at baseline

Over half (53 per cent) of the total CaPE sample were looked after on care orders or interim care orders, a proportion not markedly different to the figure of 59 per cent for the English care population in as a whole (DCSF, 2009). There were no significant differences in legal status between the MTFC or TAU groups in either the observational or the RCT samples.

Table 5.10 Legal status of total sample at baseline n (per cent) n=201

Legal status at baseline	*Number (per cent)*
Care order (s.31)	101 (50)
Interim care order	6 (3)
Accommodated (s.20)	83 (41)
Other order	7 (3)
Remanded to care	2 (1)
Not looked after (at home)	2 (1)

For children on care orders parental responsibility is shared between parents and the local authority, but for those accommodated in voluntary care parental responsibility is fully retained by the children's parents, so parents have the right to withdraw their child from a care placement at any point.

5.5 Summary

Maltreatment was a contributory reason for admission to care for half of the total CaPE sample, but virtually all of the young people (93 per cent) had experienced maltreatment at some point in their lives. The proportion with experience of sexual abuse was high (40 per cent) in comparison with other samples of maltreated children. The majority (81 per cent) of the abused or neglected young people had experienced multiple forms of maltreatment.

The young people were also exposed to other difficulties in their families. Social worker reports indicated that one in five parents were harsh towards their child most of the time and less than half were warm towards them 'most of the time'. According to their social workers, the parents of over half of the young people had never, or hardly ever, provided consistent supervision or set clear boundaries.

One-third of the young people had entered care for the first time in middle childhood and 44 per cent had entered for the first time at the age of 10 years or over. The majority had therefore been exposed to adversity in their families for a lengthy period of time.

Many had experienced considerable placement instability, which was in some cases partly due to repeated admissions to care. In the year prior to baseline they had experienced an average of 2.65 placements.

Girls in this sample had experienced significantly greater placement instability during the course of their lives, although there was no gender difference in the number of placement moves in the 12 months prior to baseline or in any other aspect of care

careers. Over half (57 per cent) of them had experienced sexual abuse, and they were more than twice as likely to have done so as boys.

Within the observational sample, the MTFC and comparison groups were well-matched in relation to reasons for admission to care, number of episodes of care and the total number of past placements experienced. There were also no observable differences in parenting style and of parenting problems between the groups in most respects. The exception was that there some indication that the MTFC group might be more likely to have parents with mental health problems (although information on this issue was available for only a very small number of the children).

Within the observational sample, children in the MTFC group had lived in more placements in the year prior to baseline than the comparison group, although this finding should also be viewed with caution as data on placement moves in this period were available for only a very small proportion of the comparison group. On average, the MTFC group were marginally more likely to have experienced maltreatment than the comparison group, and significantly more likely to have experienced physical abuse. However, they were no more likely than the comparison group to have experienced any other forms of maltreatment.

Within the RCT sample, no significant differences between the groups were found in relation to any aspects of the young people's histories, but for some comparisons these data were available on a very low number of cases.

Chapter 6 Emotional and Behavioural Difficulties at Baseline

The MTFC-Adolescents programme is targeted at looked after children and young people who are particularly challenging to care for and aims to address their emotional, behavioural and social difficulties. For this reason, our primary outcome measures for the evaluation were the HoNOSCA, a measure of emotional and behavioural difficulties, and the CGAS, a measure of social functioning, as described in Chapter 3.

This chapter first outlines the nature of the emotional and behavioural difficulties of the young people at baseline, comparing the difficulties of the MTFC and comparison groups in both our RCT sample and our observational sample. It then compares the groups in relation to their scores on our two primary outcome measures, which provide a global rating of emotional, behavioural and social functioning.

6.1 Difficulties reported by social workers and carers

Information on a range of potential emotional and behavioural difficulties was collected from social workers and carers[24]. This detailed information was available on less than half of the sample (98-108 young people), so this data can only provide an estimate of the proportion with specific emotional and behavioural difficulties within the sample as a whole. Nevertheless, it is clear from the data available that these young people were generally a troubled group who exhibited a range of problem behaviours and experienced considerable emotional difficulties.

The limited number of these reports in relation to the RCT sample meant that numbers were very small for tests of statistical significance. No significant differences between the groups were found for the RCT sample. However, on the basis of the data available, it appeared that within the observational sample, aggressive behaviour, self-harm, attempted suicide, sexualised behaviour and sexually risky behaviour were significantly more likely to be reported in relation to the MTFC group. Table 6.1 compares these reports for the groups in the observational sample and the RCT sample.

[24] Data on aggression, attempted suicide and self-harm, sexualised behaviour, risky sexual behaviour, running away and substance misuse was collected from both social workers and carers. Difficulties were recorded as present if either informant indicated them. Data on bedwetting/soling, disobedience, eating problems and stealing were collected only from carers, so the sample is much smaller.

Table 6.1 Specific behavioural and emotional difficulties indicated by professionals and carers n (per cent)

Difficulty indicated	*Observational sample n (per cent) of each group n=67-89*			*RCT sample n=19-25*	
	MTFC group	Comparison group	Sig. p	MTFC group	Control group
Physically aggressive	36 (97)	53 (78)	.**009**	16 (70)	7 (30)
Stealing	7 (33)	17 (28)	ns	4 (25)	2 (22)
Continual disobedience	14 (61)	35 (60)	ns	10 (64)	9 (100)
Attempted suicide	10 (53)	12 (25)	**.044**	0	2 (11)
Self-harm	18 (78)	29 (53)	**.044**	2 (17)	3 (38)
Sexualised behaviour	27 (93)	39 (65)	**.004**	7 (47)	5 (63)
Sexual behaviour poses risk to self or others	19 (79)	31 (56)	ns	6 (40)	4 (50)
Running away	32 (100)	51 (80)	.**004**	11 (73)	7 (78)
Misuse of alcohol	16 (70)	37 (64)	ns	4 (36)	4 (50)
Misuse of drugs	12 (63)	27 (49)	ns	4 (36)	4 (50)
Eating problems	10 (44)	21 (35)	ns	6 (38)	4 (440
Unplanned pregnancy	1 (5)	1 (2)	ns	1 (6)	0

Many of the children displayed multiple emotional and behavioural difficulties. There was no significant difference in the number of difficulties reported between the MTFC or TAU groups in either the observational or RCT sample. Five or more difficulties were reported in relation to nearly half (47 per cent) of the total CaPE sample.

Table 6.2 Number of behavioural and emotional difficulties reported n (per cent) n=152

	Number (valid per cent)
0-1	13 (8)
2-4	68 (45)
5-8	62 (41)
9-11	9 (6)

Within in the observational sample, though not the RCT sample, girls had a significantly higher number of difficulties than boys. For both samples, a higher number of emotional and behavioural difficulties were reported for children who were in residential care prior to moving to their index placement than for those in foster care (a mean of 5.08 compared to 4.11 for those in foster care)[25]. This may reflect the fact that residential care is typically used for children who are challenging to care for.

6.2 Involvement in offending

Looked after young people are over-represented within the youth justice system (YJS). They are more than twice as likely to receive a reprimand, final warning or conviction than 10-17 year olds in the wider population and are also more likely to enter custody (Department for Children Schools and Families, 2009; Parke, 2009). Since the MTFC programme was targeted at young people with especially challenging behaviour, we investigated the extent to which our sample had been involved in the youth justice system.

Over half (53 per cent) of the young people within the CaPE total sample who were over the age of criminal responsibility (10 years) had a history of offending at some point in their lives, although these offences were not necessarily committed while they were in care. The level of recent involvement with the youth justice system was very high, as 35 per cent of those who were aged 10 years or over had been convicted or given a reprimand or final warning in the six months prior to baseline. There were no differences in patterns of offending between the MTFC or TAU groups in either the RCT sample or the observational sample, so the figures presented below are for the total sample.

[25] Mann Whitney-U test for gender by number of difficulties significant at p=.046. Girls had a mean of 4.94 difficulties compared to 4.25 for boys. Mann Whitney-U test for residential or foster care by number of difficulties significant at p=.004.

Table 6.3 Involvement with the youth justice system: total CaPE sample n (per cent) n=214

	Yes
Any contact with YJS in past six months, of which*:	75 (36)
Convicted	15 (7)
Received reprimand or final warning	25 (12)
Charged with offence	35 (16)

* For those with more than one contact with the YJS, the highest order contact has been selected (that is, conviction, then final warning or reprimand, then charge).

Government statistics for 2008 show that among looked after young people in England as a whole, who are age 10 years or over and continuously in care for one year or more, nine per cent received a reprimand, final warning or conviction during the previous year for an offence committed while they were in care (Department for Children Schools and Families, 2009). In our sample, the proportion who had recently received a similar sentence was much higher, although it is possible that not all of the offences were committed after entry to care. Among those looked after for at least one year, 28 per cent had received a reprimand, final warning or conviction in the past six months, a proportion which was three times as high, during a six month period, as the figure for looked after children nationally in the course of one year (nine per cent). The level of recorded offending for this sample was therefore much higher than the already disproportionately high level of offending for the care population as a whole.

The mean age of those who had a history of offending was slightly higher than for those without a history of offending (13.6 years versus 13 years) but the difference was not significant. Age did make a difference to whether they had received a conviction in the past six months, as those who had been recently convicted were nearly one year older on average (14.1years versus 13.2 years). Consistent with the pattern for young offenders in the wider population, boys were more likely to have committed recorded offences both in the past six months (41 per cent compared to 32 per cent of girls) and ever (64 per cent, compared to 44 per cent of girls)[26].

6.3 Mental health difficulties

We supplemented the social workers' and carers' descriptions of specific difficulties with two validated measures of emotional and behavioural difficulties, the Strengths and Difficulties Questionnaire (SDQ) and The Child Behaviour Checklist (CBCL). Details of these measures are given in Chapter 3. We used the SDQ as a screening measure at baseline, as comparable data are available which allowed us to compare

[26] Mann-Whitney U-test for age by conviction significant at p=.01. Chi-square tests for gender by conviction significant at p=.01 (convicted in last six months) and at p=.005 (ever convicted).

our sample to both the wider care population and to the population of young people in the wider community (Meltzer, Gatward, Goodman *et al.*, 2000; Meltzer, Gatward, Corbin*, et al.*, 2003). The CBCL was used to provide a more comprehensive assessment of mental health difficulties at baseline.

6.3.1 Scores on the Strengths and Difficulties Questionnaire (SDQ)

The SDQ comprises five domains, four of which are summed to give a domain total. SDQ scores for total difficulties were banded according to Goodman's criteria for normal (0-13), borderline (14-16) and abnormal (17-40) functioning. In the wider community 80 per cent of children and young people would be expected to score in the normal range and only 10 per cent would be expected to have scores in the abnormal range (that is, clinically significant scores) (Goodman, 1997). In our total sample, however, the pattern was virtually the reverse, as only 20 per cent scored within the normal range but 64 per cent had clinically significant scores. The available evidence on SDQ scores for four to 16 year olds in the English care population who have been continuously looked after for at least one year suggests that 60 per cent may have emotional and mental health problems (NICE/SCIE, 2010). As previous studies have shown, children in the care population are disproportionately likely to have mental health difficulties (McCann, James, Wilson*, et al.*, 1996; Meltzer, Gatward, Corbin *et al.*, 2003). Other research has shown an association between early experience of adversity, or an accumulation of adversities, and subsequent emotional and behavioural difficulties and, as we have seen, many of our sample had experienced early and often multiple adversities (Rutter and Smith, 1995; Rutter, 2000).

We compared the proportion of our sample with clinically significant scores on the SDQ with data from a study of the mental health of a representative sample of over one thousand looked after children. We compared them to the 11-15 year olds in that study, as this was broadly the age range for our own sample. It was clear from this comparison that our sample included a much greater proportion of young people with high levels of need than would normally be found in the wider population of adolescents in care (Meltzer, Gatward, Corbin *et al.*, 2003)[27]. Again, this is not surprising as the MTFC programme is specifically targeted at young people with particularly complex needs. Table 6.4 compares the percentage of children in our sample with scores in the abnormal range to the pattern for the national sample of looked after children and for a sample of over 10,000 children living in private households in the wider community (Meltzer, Gatward, Goodman *et al.*, 2000).

[27] This study used a range of diagnostic measures rather than simply the SDQ, but nevertheless provides comparable data on several domains covered by the SDQ.

Table 6.4 Per cent with clinically significant scores on SDQ: comparison with studies of wider care population and wider community n=142

	Total study sample n=142	*11-15 year olds in care n=480*	*11-15 year olds in the community*
Total difficulties	64	49	11
Emotional symptoms	37	12	6
Conduct problems	68	41	6
Hyperactivity	51	7	1
Peer problems	81	-	-
Pro social	32	-	-

Among those for whom SDQ scores were available, 72 were placed in MTFC and 70 were in the comparison group[28]. Nearly two-thirds of the CaPE sample scored in the abnormal range for total difficulties, compared to around half of 11-15 year olds in the national sample of looked after children and roughly 11 per cent of young people in the wider community. However, the proportion with abnormal scores for total difficulties was similar to that for children in the national study who were looked after in residential placements (68 per cent), suggesting that MTFC was often targeted at children who might otherwise be placed in residential care (Meltzer, Gatward, Corbin *et al.*, 2003). Just under half (47 per cent) of the MTFC group had been in residential care prior to entry to their MTFC placement, as were 60 per cent of our comparison group at baseline.

The proportions with conduct problems and emotional problems were markedly higher than for Meltzer's larger sample of 11-15 year olds in care. It was particularly striking that half of the young people in the study sample had clinically significant scores for hyperactivity, over seven times as many as in the national sample of looked after children and 50 times the proportion in the wider community. We also asked social workers to indicate whether young people had received a diagnosis of ADHD. They reported that they were aware of this diagnosis in relation to nearly one-fifth (18 per cent) of the young people.

Consistent with the pattern for 11-15 year olds in the national samples, girls were more likely than boys to have abnormally high scores for emotional disorders (46 per cent of girls compared to 29 per cent of boys), and boys were more likely to score highly for hyperactivity than girls (61 per cent of boys compared to 40 per cent of girls)[29]. However, the variation in scores for emotional disorders and hyperactivity between the sexes was much smaller than that for the national sample, reflecting the high levels of need of both sexes in our sample.

[28] Their mean ages were 12.4 years for the MTFC group and 13.6 years for the comparison group, similar to those for the sample as whole.

[29] Mann-Whitney U test significant at p=.029 for emotional problems and p=.001 for hyperactivity.

Within both the observational sample and the sample as a whole, the MTFC group were more likely than the comparison group to have scores for total difficulties, conduct disorder and hyperactivity that were in the abnormal range. No significant differences in scores between the experimental and control groups were found for the RCT sample.

Table 6.5 Per cent with clinically significant scores on SDQ by sample and group

	Observational sample n=114			*Total sample (RCT and observational samples) n=142*		
	MTFC group	Comparison group	Sig. p	MTFC group	TAU group	Sig. p
Total difficulties	79	54	**.003**	75	53	**.005**
Emotional symptoms	47	38	ns	42	33	ns
Conduct problems	79	64	**.041**	76	60	**.029**
Hyperactivity	62	39	**.01**	60	41	**.032**
Peer problems	83	79	ns	83	79	ns
Pro social	28	30	ns	35	30	ns

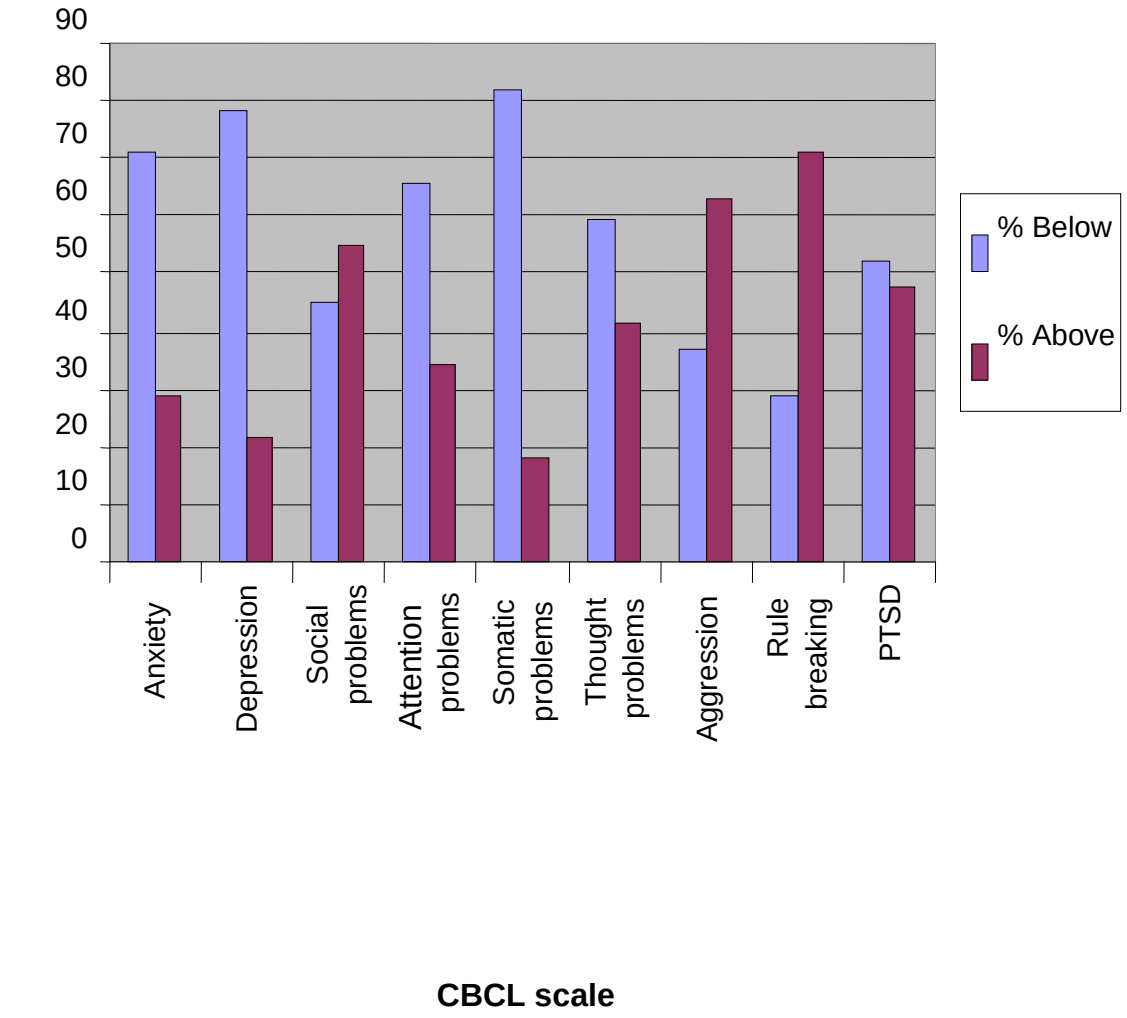
6.3.2 Assessment of psychopathology (CBCL)

At baseline the CBCL data, available on 73 young people within the CaPE sample as a whole, showed that there was a high prevalence of psychopathology within this sub-sample. Eighty per cent had a total CBCL score at or above the threshold of clinical disorder significance. Of these, 69 per cent had t-scores (a standardised score) above the clinical threshold for ‘externalising’ (aggressive, oppositional and overactive) problems and 30 per cent had clinically significant ‘internalising’ problems (anxiety, depression and somatisation). Comparative figures for general population norms in UK 11–15 year olds are 6.2 per cent for externalising disorders and 5.6 per cent for internalising disorders (Meltzer, Gatward, Goodman *et al.*, 2000).

To illustrate the specific nature of these problems Figure 6.1 shows the percentage of young people who had t-scores in the clinically significant range for each sub-scale of the CBCL. Over one-quarter (29 per cent) of the sample had anxiety problems and 22 per cent were reported to have problems associated with depression and withdrawal. These rates were much higher than the 4.6 per cent prevalence rate for

anxiety disorders and 1.8 per cent prevalence rate for depression within the general population of 11 to 15 year olds (Meltzer, Gatward, Goodman *et al.*, 2000).

Figure 6.1 Percentage of the total CaPE sample above clinical threshold for CBCL sub-scales (n=73)



Strikingly, over half of the sample (55 per cent) had problems with their social relationships including jealousy, experience of bullying and lack of age appropriate

relationships with peers, although this was somewhat lower than the proportion with peer problems indicated by the SDQ (81 per cent)There were also very high rates of aggressive behaviour problems (63 per cent above clinical threshold) including physically attacking others, swearing, fighting and arguing) and 71 per cent of this sub-sample had problems with rule-breaking behaviour (including lying, stealing, setting fires as well as substance and alcohol use). These figures are fairly close to the proportion rated as having conduct problems on the SDQ (68 per cent).

Finally, almost half of the sample (for whom data were available) were reported to have symptoms associated with clinical levels of Post Traumatic Stress Disorder (PTSD), in great contrast to the 0.4 per cent prevalence in the general population (Meltzer, Gatward, Goodman *et al.*, 2000). PTSD has been shown to be associated with abuse, neglect and parental adversity which, as we have seen, had been a feature of the lives of many of the young people in this sample (Deblinger, McLeer, Atkins*, et al.*, 1989).

There were no significant associations between any of the CBCL sub-scales and age at assessment. Although there was a slight trend within the data for externalising, social and attention problems to be associated with younger age, these associations are not statistically significant[30].

Consistent with the literature on gender differences in psychopathology in adults (Seedat, Scott, Angermeyer*, et al.*, 2009) and child and adolescent epidemiological studies (Meltzer, Gatward, Goodman *et al.*, 2000), and with SDQ scores for the CaPE sample, females had higher overall internalising scores and males had higher overall externalising scores, however the difference in these scores was not significant[31]. Within the sub-scales there were some significant gender differences. Females had higher somatic problem scores, lower attention problems scores and lower rule-breaking scores than males[32].

Data on psychopathology were available at baseline for 23 of the CaPE MTFC group and 50 of the TAU group. Unlike our findings in relation to scores on the SDQ for 142 young people in the sample, there were no significant group differences in any of the CBCL total or sub-scale scores between the CaPE MTFC and TAU groups. This discrepancy is likely to be due to the much smaller size of the sub-sample for whom CBCL scores were available. Examination of the scores shows that there were no noticeable trends of difference in scores between the two groups and this was confirmed by statistical analysis[33]. Due to the limited amount of data available it is not

[30] r = -.186, r = -.226 for social problems and r = -.217 for attention problems.
[31] t = 1.82, df = 71, p = .072, *n.s* and t = -1.85, df = 71, p = .069, *n.s*.
[32] Somatic problem scores U = 471, z = -2.2, p = .027. Attention problems scores U = 427, Z = -2.6, p = .008. and Rule-breaking scores t = -2.20, df = 71, p = .031.
[33] Mann-Whitney U tests and t-tests as appropriate. This result remains in multivariate analysis controlling for age and gender.

possible to compare the scores of the MTFC and comparison/control groups within the observational and RCT sample separately using statistical methods.

6.4 Measures of global functioning

The young people's general social functioning was assessed at baseline and follow using two standardised measure, the C-GAS (Children's Global Assessment Scale) and the HoNOSCA, as described in Chapter 3. At baseline, results for the cohort as a whole showed an overall CGAS score of median 47 (IQR 42-54) indicating severe impairment to functioning in one or more areas. This result reflects the known significant functional impairment in this group of young people. It is, for instance, of equivalent overall severity to that seen in a group of young people admitted into psychiatric inpatient care (Green, Kroll, Imre *et al.*, 2001).

Sub scores on the HoNOSCA highlight the particular areas of difficulty they show. Greatest difficulties lay in the domain of anti-social behaviour (median score 3 (IQR 2 - 3.5). Moderate, but still significant levels of difficulty were shown in the domains of over activity and concentration (median score 2 (IQR 0 - 2), emotional disorder (median 2 (IQR 1 - 3), peer relationships (median 2 (IQR 1 - 3), family relationships (median 2 (IQR 2 - 3) and school attendance (median 2 (IQR 0 to 4). Less severe difficulties were shown in scholastic and language skills and self care and independence and non-organic symptoms. The range of difficulties is striking, involving all aspects of social functioning and relationships.

6.4.1 Group comparisons – whole cohort

Whole-cohort comparison between CaPE MTFC cases and CaPE TAU cases on HoNOSCA and CGAS is shown in Table 6.6. In all domains the MTFC group show more symptomatology and impairment than the TAU group. Overall C-GAS scores were six points more severe in the MTFC group than TAU. Young people included in the MTFC programme showed particular and significant difficulties in areas of anti-social behaviour, and peer and family relationships, difficulties consistent with the target aims of the intervention.

Table 6.6 Between groups comparison – CaPE total sample

Sub-scale	*CaPE MTFC*			*CaPE TAU*		
	n	Median	IQR	n	Median	IQR
Anti-social behaviour plus	113	3	2-4	100	2	2-3
Over activity	103	2	1-2	84	1	0-2
Self-harm	110	0	0-1	97	0	0-2
Drugs and alcohol	104	0	0-1	96	1	0-2
Scholastic and language	98	2	1-3	91	1	0-2
Physical health	105	0	0-1	97	0	0-1
Hallucinations and delusions	104	0	0-0	81	0	0-0
Non-organic symptoms	84	1	0-2	87	0	0-1
Emotional symptoms	105	2	1-3	86	2	1-2
Peer relationships	107	3	2-3	93	2	1-2
Self-care and independence	79	1	0-1	83	0	0-1
Family/carer relationships	102	3	2-3	100	2	2-3
School attendance	102	.5	0-4	97	2	0-4
CGAS*	112	45	41-51	100	51	42-60

+ Higher score on HoNOSCA, indicating greater severity.

* Lower score on CGAS, indicating greater severity.

More precise comparisons are made within the observational sample and RCT sample respectively in Tables 6.7 and 6.8.

6.4.2 Group comparison - observational sample

In the observational sample, MTFC cases showed significantly more severity particularly in anti-social behaviour, over activity, emotional symptomatology, peer relationships and family relationships domains. There was a trend towards more severity also in drug and alcohol usage, scholastic and language ability, physical health self-care, and independence. Overall, the C-GAS score was significantly more severe in the MTFC cases than the comparison cases (see Table 6.7).

The differences found here at baseline were anticipated and reflected the ways that each sample was generated. In the observational study controls were recruited from

the equivalent authority areas to those recruiting MTFC subjects, however by the nature of the selection process for MTFC in authorities we came to recognise that it would be difficult to recruit independent controls with the same overall severity of symptoms (even though they all met the standard inclusion criteria for CaPE). This significant difference in baseline severity between the arms of the observational study had an important impact on the nature of the analysis that we could undertake, which is detailed in the statistical methodology section of Chapter 3.

Table 6.7 Group comparison in the observational sample of CaPE

	MTFC group		*Comparison group*		*Mann-Whitney U*	
	n	Mean rank	n	Mean rank	z	p
Anti-social behaviour	93	103	87	76.8	-3.6	.000
Over activity	86	90	73	68	-3.2	.001
Self-harm	90	87	85	89	-.26	.78
Drugs and alcohol	84	76	84	93	-2.3	.02
Scholastic and language	78	86	78	71	-2.3	.024
Physical health	85	79	87	94	-2.2	.028
Hallucinations and delusions	85	78	69	77	-.05	.96
Non-organic symptoms	66	73	76	70	-.65	.51
Emotional symptoms	85	88	75	71	-2.4	.015
Peer relationships	88	98	81	70	-3.89	.000
Self-care and independence	63	75	73	63	-1.98	.048
Family/carer relationships	84	97	88	77	-2.79	.005
School attendance	82	79	85	88	-1.3	.19
CGAS	92	76	87	104	-3.6	.000

6.4.3 Group comparison – RCT sample

By contrast, the two arms of the RCT sample were excellently matched (Table 6.8). The experimental (MTFC) and control (TAU) arms did not differ on any aspect of HoNOSCA domain or C-GAS total functioning. This finding reflects the power of the random allocation design through its effectiveness in generating equivalent groups for comparison.

Table 6.8 Group comparisons in the RCT sample

	Experimental		*Control*		*Mann-Whitney U*	
	n	Mean rank	n	Mean rank	z	p
Anti-social behaviour	20	17	13	16	-.35	.73
Over activity	17	16	11	13	-.83	.4
Self-harm	20	16	12	17	-.63	.53
Drugs and alcohol	20	16	12	17	-.25	.8
Scholastic and language	20	18.5	13	14.7	-1.2	.24
Physical health	20	15.5	10	15.5	.00	1.0
Hallucinations and delusions	19	16	12	15	-.52	.6
Non-organic symptoms	18	16	11	14	-.68	.5
Emotional symptoms	20	17	11	14	-.83	.4
Peer relationships	19	17.8	12	13.1	-1.47	.14
Self-care and independence	16	13.5	10	13.5	.00	1.0
Family/carer relationships	18	15	12	16.3	-.45	.65
School attendance	20	15	12	18.9	-1.2	.23
CGAS	20	16.6	13	17.6	-.31	.75

6.4.4 Relationship between observational and RCT samples

Finally, there is the question of whether the RCT and the observational samples differed systematically at baseline – that is, whether the smaller RCT cohort could be considered representative in functional severity of the larger observational group. In this regard, comparison on HoNOSCA domains and C-GAS score shows that there was very little significant difference between the two samples. For C-GAS the median score in RCT sample was 47 (IQR 41 to 53); for the observational sample median C-GAS was 47 (IQR 42 to 54). The only significant between-group difference on HoNOSCA domains lay within the scholastic and language skills domain (Mann-Whitney U Z = -2.3, p = 0.02). There was a non significant trend towards a difference also in emotional symptomatology (Z = -1.93, p = 0.053).

6.5 Summary

Detailed data on emotional and behavioural difficulties were available for just under half of the sample. The limited data available suggested that, within the observational sample, aggressive behaviour, self-harm, attempted suicide, sexualised behaviour and sexually risky behaviour were significantly more likely to be reported in relation to the MTFC group than the comparison group but there was no apparent difference between the groups in the RCT sample.

The level of recent involvement with the youth justice system was very high, as 35 per cent of those who were age 10 years or over had been convicted or given a reprimand or final warning during the six months prior to baseline. There were no differences in patterns of offending between the groups in either the RCT sample or the observational sample.

Nearly two-thirds (64 per cent) of the young people in the CaPE sample had clinically significant total scores for emotional and behavioural difficulties on the SDQ. This was a much higher proportion of children than would be found in the wider population of 11-15 year olds (11 per cent), but similar to the proportion for children looked after in residential care (68 per cent).

The observational cohort showed a significant imbalance at baseline on mental health difficulties, with the MTFC group showing more severe problems in most areas and in overall rating. The RCT cohort by comparison was well matched, reflecting the power of this procedure in producing matched groups for comparison. The contrast between Table 6.7 and Table 6.8 in itself provides the rationale for using a random allocation design in conducting evaluations of this sort and this has important implications for design of future evaluations in social care. However, the comparison of overall numbers in the observational and RCT samples reflects the difficulties that the CaPE trial had in establishing the RCT widely amongst the trial sites. These difficulties and their implications will be further discussed in the Conclusion to the report. Overall levels of morbidity did not vary between RCT and observational cohort groups.

Chapter 7 Summary of Baseline Data

This chapter briefly summarises the baseline data on the young people's characteristics and circumstances at baseline (presented in Chapters 4-6) and compares study data to to government data on all children looked after in England and to audit data on children in the national MTFC-A pilot programme
Table 7.1 compares key data on the characteristics, circumstances, histories and emotional and behavioural difficulties of the groups within the case control sample and the RCT sample. It also compares baseline data across the case control and RCT samples. As we saw earlier, there were a number of important differences between the groups in the observational sample and these are indicated in Table 7.1. We take account of these differences in the outcome analyses which follow. No significant differences between the groups in the RCT sample were observed, but data on some issues were available for very few young people.

Table 7.2 compares data on our sample to national data on looked after children(Department of Children, Schools and Families, 2009). As this table shows, due to the targeting of the MTFC-A programme on older children with complex needs, our sample differed from the wider care population in some respects. They were more likely to be in (non-secure) residential care and also more likely to be in secure accommodation. They also appeared more likely to have clinically significant emotional and behavioural difficulties, to have recent convictions, problems of substance misuse and to have been assessed as having special educational needs.

Table 7.2 also compares key baseline data on the study sample with audit data from the MTFC-A pilot programme provided by the National Implementation Team. These audit data are available for the 193 children who had entered the MTFC-A programme by mid-2010. As this table shows, the profile of our sample was similar in most respects to that of the total population of young people who had entered the programme by that point.

Our sample was composed of children who either entered MTFC or were eligible for it. Since the MTFC group in our RCT sample includes some children who were never placed in treatment foster care, in Table 7.2 we have divided the sample into those who entered treatment foster care for any period of time and those who did not, in order to make this comparison with national implementation team data more meaningful.

Table 7.1 Characteristics and circumstances of the two samples*

	Observational sample n=185			*RCT sample n=34*	
	MTFC group	Comparison group	*Sig. p*	Experimental group	Control group
Child characteristics					
Mean age (years)	12.3	14	*.001*	12.6	12.9
Male	57%	52%		65%	43%
White British	88%	90%		70%	64%
Learning disability	16%	12%		17%	8%
Baseline placement					
Foster care	51%	36%	*.048*	30%	29%
Residential care (not secure)	35%	61%	*.048*	70%	71%
Secure unit	4%	3%		10%	0
Birth family	6%	2%		0	0
Education					
Mainstream school	52%	35%	*.031*	30%	43%
Special (day)	16%	12%		20%	21%
PRU/home tuition	10%	16%		20%	21%
No education provision	7%	6%		10%	0
Frequent truancy	11%	14%		17%	18%
Experience of maltreatment					
Past sexual abuse	44%	42%		30%	21%
Past physical abuse	71%	43%	*<.001*	45%	50%
Past emotional abuse	83%	77%		85%	79%
Past neglect	77%	68%		85%	71%
Any maltreatment	97%	89%		95%	86%
Three+ types maltreatment	63%	46%		50%	43%
Care history					
In care <1 year	36%	29%		19%	39%
Mean age at first entry (yrs)	8.3	9.5	*.019*	7	8
Past placements (mean)	5.5	5.07		2.7	2.1
Placements last year (mean)	2.74	2	*.007*	1.2	1.5
Emotional and behavioural difficulties					
Physically aggressive	97%	78%	*.009*	100%	78%
Self-harm	78%	53%	*.044*	17%	38%
Sexualised behaviour	93%	65%	*.004*	47%	63%
Risky sexual behaviour	79%	56%		65%	35%
Running away	100%	80%	*.004*	73%	78%
Alcohol abuse	70%	64%		36%	50%
Drug abuse	63%	49%		36%	50%
Conviction, reprimand or final warning in last 6 months	25%	31%		25%	31%
Convictions (ever)	32%	42%		30%	31%
SDQ: over clinical threshold	79%	54%.	*.003*	63%	44%

* Items are highlighted in bold where significant differences were found between groups in the observational sample. No evidence of significant differences was found between groups in RCT sample, but numbers were small.

Table 7.2 Baseline characteristics and circumstances of sample compared to other samples

	Total CaPE sample n=219		*National MTFC-A pilot n=193*	*English care population*
	Did not receive MTFC n=114	Received MTFC n=105		
Child characteristics				
Mean age (years)	13.9	12.2	12.6	
Male	52%	57%	56%	57%
White British	88%	84%	86%	73%
Learning disability	14%	14%	17%	
Baseline placement				
Foster care	36%	48%	37%	73%
Residential care	57%	41%	45%	10%
Secure unit	3%	6%	7%	<1%
Birth family	2%	6%	13%[34]	
Education				
Mainstream school	37%	54%	48%	
Special schooling (any type)	27%	23%	26%	
No education provision	6%	9%	10%	
Frequent non-attendance	14%	13%	22%	
SEN statement	50%	58%	48%	28%
Past maltreatment				
Any maltreatment	89%	97%	93%	
Three plus types maltreatment	45%	63%	33%	
Emotional and behavioural difficulties				
Physically aggressive	80%	98%	82%	
Self-harm	49%	63%	34%	
Risky sexual behaviour	54%	69%	51%	
Running away	80%	93%	63%	
Substance misuse (alcohol/drugs)[35]	65%	67%	72%	4.9%
Recent convictions[36]	30%	26%	50%	9%
Scores above clinical threshold for emotional and behavioural difficulties				
Total difficulties (SDQ)[37]	53%	78%	82%	49%
Conduct problems	58%	81%	84%	41%
Emotional problems	32%	44%	45%	12%
Hyperactivity	41%	63%	62%	7%

[34] National implementation team data includes extended family.
[35] National data on substance misuse and convictions refer only to children looked after continuously for one year or more. Data on convictions are given as a percentage of those age 10 years or over; national data on SEN statements refer only to school age children.
[36] This data refers to convictions, reprimands and final warnings: study data covers the last six months, national data covers last 12 months and pilot sample data covers 'recent offending'.
[37] Sub-scale scores for study sample were compared to DAWBA scores for national pilot sample: while these are not identical instruments they cover similar domains. Scores are also compared to national data on a large sample of 11-15 year olds in care (Meltzer *et al*., 2003).

Chapter 8 Changing Placements: The Young People's Wishes and Expectations

Brief telephone interviews were conducted with148 young people in the total CaPE sample shortly after they joined the study, to explore their wishes and expectations about placements. This chapter first discusses the wishes of all the young people regarding where they would ideally like to live. It then focuses on those in the MTFC group to explore their expectations of treatment foster care.

8.1 The young people's views about where they wished to live

We initially asked the young people where they would ideally like to live if they could live anywhere they wished, and who they would ideally like to live with, if they could choose. Just under half of the MTFC group and one-third of the comparison group said they wanted to live with their family. Several of the young people volunteered an explanation for this choice. Most often, they emphasised the fact that they loved and missed their mothers:

> *Me mam, just coz she's me mam and because I am close to her.*
>
> *Home because I love mummy, my daddy, my cat and my dog.*
>
> *Home please, just with my family. I want to live with my family again.*
>
> *Home with my mum, because I love her.*
>
> *With mam coz I love her so much.*
>
> *With Mum, I really miss her.*

For others, a sense of belonging to their birth families, or the normality of living with birth families, also had a bearing on their wish to return to them:

> (With) *Mum. That's where I belong.*
>
> *At home, with my family - brothers, sisters and mum. Because it's my family.*
> *At my mum's, 'cos everyone lives with their mum and that's just what I want.*

Some accepted that going home was not an option for them. One said she would prefer to be with her mother, but recognised that was not possible, while another

stated that she did not wish to go home as she and her family did not '*get along*.' For others who did not mention a desire to return home, it was not possible to discern in the course of a short telephone interview whether this was because they did not feel that returning home was likely to be a realistic option or because they genuinely did not wish to return.

We then asked the young people who they would like to live with, if they could choose anyone at all. Over half of them mentioned their families, including parents, grandparents and siblings. Mothers were the most common choice, mentioned by 43 per cent of the MTFC group and just under one-quarter of the comparison group, but less than one in 10 mentioned their fathers. Sadly, just under one-quarter could think of no-one they would specifically like to live with. One in 10 indicated that they wanted to remain with their current foster carer and a similar proportion wished to return to a previous carer, viewing them as quasi-parental figures:

> *Previous carers - they were like a mum and dad to me, was there five months.*
>
> *I love her like my own mum.*
>
> *Old foster carer, she is like my mum. I have two mums really.*

Next, we focused specifically on care placements and asked them to tell us which kind of care placement they would choose, if they could choose any placement they liked. Half of the sample specified foster care and three in 10 specified residential care. In most cases, they said they preferred the type of placement that they were currently in. Foster care was thus the preference of the majority of those who were in foster care at the time of the interview, while residential care was mainly mentioned by those who were in residential care at the time. However, just under half of those in residential care at the time of the interview expressed a preference for foster care.

Some who preferred foster care indicated that this was because of the family setting, and the possibility of building close relationships in such a setting, or because they had felt cared for by previous foster carers.

> *Because if you get into a good foster placement and build a good relationship up with your carers it will be a nice and secure environment to live in.*
>
> *Because I think if you can get a bond with foster care it's really good, more attention just for you. You progress more I think.*

For many, their preference for foster care was due to the fact that it felt '*more like a home*', where it was possible to feel that '*you've got a family*' and to be '*treated as*

part of the family'. Others mentioned that they preferred foster care because it provided the 'normality' of family life, '*it's just normal*.' They mentioned their experience of having normal family experiences in foster care, such as having pets, and '*going out and having fun*'. A few mentioned that they felt safe in their current foster placement. Other reasons given were liking particular foster carers and receiving more individual attention in foster care.

Some of those with experience of residential care also expressed a preference for foster care. They felt that in foster care they would avoid the stigma of being in a children's home and being bullied by other children. They also thought there would be fewer restrictions there:

> *Easier – less people nagging. Eight out of nine staff are on at you in residential.*

> *Cos I would get more free time – be more happy instead of being followed round.*

Some of those with experience of residential care mentioned that they would like to avoid the changeover of staff working shifts, but others said that it was more enjoyable to live in a group setting rather than in a family setting. Several spoke positively of the staff, who they described as helpful and supportive. Views about the nature of relationships formed in residential care were also a factor, as some did not want an alternative parental figure, '*I already have a family*.' For some young people who struggle with their relationships, having a range of carers and a group of other children to live with may be perceived as an advantage:

> *If you have argument with staff one day, you're not always with same person the next day.*

> *I cope better (*in residential care*). Get stressed out when living with other people, with a stranger.*

> *There are other children - you meet children from different age groups and different kinds of people. It's boring to be on my own or with only one other person.*

For two young people, unsuccessful foster placements or unhappy experiences in foster care in the past were given as the reason for preferring residential care:

> *Foster families are weirdos, I've been in 11 family homes and they are all weird.*

> *I was assaulted by a foster carer.*

All of the young people were asked whether they wanted to stay or move from their current placement. Many were understandably uncertain about moving to a new home. Among the 86 who were interviewed prior to moving to their index placement, around half wanted to move to the new placement, one-third wished to remain where they were and the others were unsure.

8.2 Expectations of treatment foster care

We spoke to 13 young people who were about to move to an MTFC placement about their expectations of it. Of these, nine wanted to move to the treatment foster care placement and 11 expected it to be helpful. At the time of the interview most of this group were in residential placements, but four were in foster placements and one was living at home. Some of these young people looked forward to moving to MTFC and were optimistic about how much they would enjoy it. This positive anticipation was sometimes underpinned by a wish to move from somewhere they did not want to stay. Others were sad to leave behind people they knew but were nevertheless positive about the move:

> *I can't wait. It'll be really good - much better.*

> *Different in a good way. Not loads of staff. Not loads of kids moving in night and a day. A chance: try and stay in foster care if it works out.*

> *I think it is going to be good … because there are lots of people to talk to.*

The few who did not want to move explained that they were happy where they were, and in one case did not want to leave their family home, or that they did not want yet another placement move when they had already had so many:

> *I've moved so many times, it'll be annoying. Starts to get to you – want to smack the person.*

Some had mixed feelings, saying that they felt settled and were '*a bit worried*' about the move to a new placement. Others viewed the impending move with some trepidation, anxious about the restrictions they anticipated. Understandably, as the placement date drew closer some became more anxious about what treatment foster care would entail:

> *I did want to go but having some doubts now – I know it's going to be really hard the first two weeks coz I met my new carer today and I had been told some of the things that happen. … it's a new experience so I'll see what it's like.*

I was scared and nervous … I thought it would be strict when they explained it to me - all the rules.

(They) *said you have to earn points to go out, have to do what you're told.*

8.3 How motivated were the young people to enter an MTFC placement?

Some of the young people indicated that they were they were willing to move to MTFC because they thought it might be helpful to them. Although a few were clearly not at all motivated to join the scheme, with others it was difficult to assess the level of motivation. A few said that they had joined the scheme because ether a parent or their social worker had persuaded them that it would be a good idea.

Motivation appeared to be linked to a degree of acceptance on the part of the young people that their behaviour was a serious problem and that they needed help to change it. Those who were motivated to make use of MTFC generally appeared optimistic about the positive changes they felt it would bring to their lives:

I want to calm down a bit and get on the right track.

I thought it would be good for me and my future though, so I wanted to go here.

Help me with my behaviour and give me more time to myself.

Because I thought it would help my problems, be good for me - help me in the future, to get a good job and that.

I will be better than I was. I used to hit everyone at home but when I go back I know I am not going to do it.

Stay here and sort out my problems - my behaviour and anger, work on my anger.

Most were optimistic about the changes that treatment foster care might bring, in some cases accepting that their behaviour was a problem and needed to change if they were to be able to settle down:

Learning to live in families again. Maybe change my behaviour a bit.

Get help without mum there.

I won't have to keep moving, making friends and losing them.

For some of those who accepted that their behaviour was problematic, their motivation to make use of MTFC was to some extent underpinned by a hope that if they changed, they might be able to return home:

If someone phoned me after this and said 'J you're going home' I'd be made up, but I know I have to sort my behaviour first - to work on that.

So I can improve and go home.

One young person, who said she hoped to return home to her mother, recognised that she might benefit from more consistent parenting than she had previously received at home:

Mum … doesn't give me any rules so you'd end up taking over. She doesn't know how to be a parent.

A few, however, explained that they had moved to MTFC as they would to any other placement, because their social worker had told them it was the best option, or they felt there was no better alternative available:

I've got to - my social worker told me I needed to because of my behaviour.

I was horrible trouble with my behaviour and things like that, they said I had to go on it or move foster carers and I didn't want to move or do either, so I did treatment foster care.

I did it because my mum wanted me to.

8.4 Summary

Just under half of the young people interviewed before they moved to their index placement indicated that they would like to return to their families if they could. Of these, most mentioned their mothers but very few mentioned wishing to return to their fathers.

When asked what kind of care placement they would ideally like to live in, most young people mentioned the same kind of placement they were currently in, although around half of those in residential care expressed a preference for foster care. Children emphasised the normality of family life that foster care could provide and the opportunity to build close relationships. Those who preferred residential care sometimes appeared to welcome the less intense nature of relationships in that setting.

Among the small group interviewed shortly before moving to their MTFC placement, most were positive about it, although they were often anxious about the move. Some accepted that their behaviour was causing them problems and hoped that treatment foster care would help them change this.

Section 3: The Interventions

Chapter 9 Comparing the Index Placements

This chapter compares the index placements to which, in most cases, the young people moved at baseline. For just under half of the sample the index placement was a placement in MTFC, while for most others the index placement was either another type of foster placement or a residential placement. This chapter first describes the nature and purpose of the young people's index placements. It then examines how far key elements of the MTFC programme (described in Chapter 2) were delivered in practice, according to the MTFC teams, and the extent to which any similar strategies were employed in other types of placement.

Descriptive data on the index placements were collected from professionals and carers around three months after the baseline placements began, either from the MTFC teams or, for those who did not receive treatment foster care, from social workers. Telephone interviews were also conducted with 115 index carers, who were either MTFC carers, other foster carers or residential staff.

9.1 The index placement

Just under half of the sample entered MTFC placements, as shown in Table 9.1.

Table 9.1 The index placements n (per cent) n=219

Placement type	*Observational sample*	*RCT sample*	*Total sample*
MTFC	93 (50)	13 (38)	106 (48)
Other foster care	32 (17)	3 (9)	35 (16)
Residential care (local authority)	25 (14)	7 (21)	32 (15)
Residential care (other)	28 (15)	9 (26)	37 (17)
With parents or relatives	2 (1)	2 (6)	4 (2)
Other	5 (3)	0	5 (2)
Total	185 (100)	34(100)	219 (100)

The young people in MTFC placements included one in the RCT sample who had been randomised to the control group but subsequently entered an MTFC placement. Eight others in the RCT sample were randomised to MTFC but did not move there.

9.1.1 Movers and non-movers

It had been intended that all young people in the study would move to an MTFC or alternative placement shortly after recruitment to the study. In practice this did not always happen. Although a criterion of being recruited to TAU was that they were expected to move from the placement in which they were recruited, in the event a majority of them actually stayed in their baseline placement, which was then counted as their index placement too. The same was true for many of those randomised to MTFC, who were expected to move to an MTFC placement but did not do so. In contrast all those in the non-randomised MTFC sample moved to their index placement, by definition. This difference between the MTFC and TAU samples raises the issue of whether any subsequent differences found between them (or indeed any lack of difference) could be attributed to the non-movers in TAU.

Among those who did not enter MTFC placements, a total of 62 (54 per cent) were ‘non-movers’. Non-movers were defined as those who did not move to a new placement within three months of joining the study. Within the observational sample, 59 per cent of the comparison group did not move placement. Within the RCT sample, one-third (seven) of the young people randomised to MTFC and just under half (six) of those randomised to the control group did not move from their baseline placements, despite initial plans for them to do so. The majority (68 per cent) of non-movers were in residential care. Two-thirds (69 per cent) of those in residential placements at baseline did not move to a new placement and nearly half (46 per cent) of those in foster care also remained in the same placement. Overall, 88 per cent of the non-movers were still in the same placement at follow-up. At the baseline date, the non-movers had been in their baseline placements for between 42 days and five years.

It is possible that a new placement had been planned but could not readily be found, or that placements that were unsettled subsequently settled down again. Whatever the reason, these non-movers did not experience a change of placement at baseline and this was likely to affect their scores on our measures of baseline functioning at one year follow-up. Young people in an unsettled placement may display greater emotional and behavioural difficulties during a time of crisis, but may then settle more happily into a new placement and show substantial improvement by follow-up. For those who remained where they were, the change was likely to be less dramatic. We will return to this issue of non-movers in our discussion of outcomes.

9.2 Purpose of placement

MTFC teams and social workers were asked to indicate the main purpose of the index placement from a list of options. For those in treatment foster care, the main purpose of the placement was said to be ‘to help foster child to change in some way’

in 60 per cent of cases. In most other cases, MTFC staff indicated that the main purpose was to prepare the child to settle elsewhere, either in care or, in a few cases, at home.

In contrast the main purpose of placement for those not in MTFC was most commonly to provide a long term home, which was reported in relation to 61 per cent of the foster placements and 69 per cent of the placements in local authority residential care. However, placements in out of authority residential care were most commonly reported to have a purpose similar to that of MTFC placements, either to help the child change or to prepare them for another placement or for independence.

Table 9.2 Main purpose of index placement by placement type (per cent) n=125

	MTFC (n=60)	*Other foster care (n=28)*	*Local authority residential (n=16)*	*Other residential (n=21)*
Help child to change in some way	60	0	6	14
An emergency place	0	4	.0	5
Assessment of child's needs	5	7	.0	.0
Reuniting child with parents	12	7	13	5
A long term home	2	61	69	19
Preparation for another placement	18	11	13	24
Preparation for independent living	2	7	.0	14
Other	2	4	.0	19
Total per cent	100	100	100	100

Professional reports indicated that for those not in MTFC placements, the move to the index placement had been planned in less than half (46 per cent) of all cases. Oddly, given the extensive assessment and preparation that normally precedes placement in treatment foster care, 28 per cent of the MTFC placements were also reported to have been unplanned. In a small number of cases local authorities required MTFC teams to provide emergency placements for young people, and it is possible that the programme may not have been entirely appropriate for all of those placed in these circumstances.

9.3 Comparing interventions

As we saw in Chapter 2, MTFC aims to provide a wraparound service which is delivered by highly-trained and well-supported foster carers and a clinical team comprising programme supervisors, individual therapists, skills workers, birth family therapists and, in the English programme, education workers. Two key questions for the evaluation were:

1. To what extent did the MTFC teams deliver this multi-dimensional, wraparound service in practice?
2. To what extent did the various elements of the MTFC, programme, as delivered to these young people in an English setting, differ from the strategies employed in other types of foster care or in residential care?

We used simple descriptive measures to compare the interventions received, but our findings in relation to service delivery should be viewed only as broadly indicative, as we were unable to directly observe the various interventions. Our data were gathered from MTFC teams and, for the comparison group, from social workers. Clearly, some MTFC staff may have had an investment in reporting that the MTFC model was being implemented as intended and, equally, some social workers may have wished to show that the young people they were responsible for were being cared for appropriately in alternative placements. With these *caveats* in mind, we describe and compare the use of behaviour management strategies, support with education, the promotion of positive social skills and work with birth families or follow-on carers.

9.3.1 Behaviour management

Strategies for the promotion of positive behaviour lie at the heart of the MTFC programme. A key element of the programme is the points and levels system, described in Chapter 2, which was being used with all but one of the 60 young people for whom MTFC teams returned questionnaires at this stage.

Operating the points and levels system is a skilled task. Teams must track and analyse problem behaviours, understand how they function and how the carer responds, and plan how to help the young person develop a pro-social alternative behaviour. This involves planning which incentives to use and what replacement skills are needed by the young person. Teams have to plan how these might be incrementally achieved and how the team might support both the carer and the young person to be successful in making the changes. For example; if ‘Jon’ is fighting in school, the programme cannot give points for not fighting and a consequence (removal of points) for fighting. The team needs to track the behaviour with the school, and in doing so might discover that Jon has been fighting in the playground because he has no friends and others call him names. The individual therapist might then work with him on incrementally building skills for making friends: how to approach other people, how to begin and end conversations, what to talk about, and he might then practise this in the community with the skills coach and at home with the carer. The Programme Supervisor might then help him develop better emotional regulation, helping him to understand when he is getting angry about the name calling and to develop strategies to manage this, for example, telling a teacher or removing himself from the situation The Programme Supervisor might also contact his school to alert teachers to the problem so that they can reinforce his strategies for

dealing with these situations. The team would also support the foster carer, so that s/he knows how to talk to Jon about how he feels, can model handling difficult situations and award points for attitude and maturity, for walking away from trouble, and so on[38].

This system of points and levels for rewarding positive behaviours and providing consequences for negative behaviours was used only in the MTFC placements. Other placements may also use alternative strategies to promote positive behaviour. However even if these strategies are also, like MTFC, informed by social learning theory, they may be quite different in practice and may also be less comprehensive in nature. We asked MTFC teams about the extent to which, in their view, their foster carers were implementing the behaviour management strategies in which they had been trained, posing a series of questions which reflected key elements of the MTFC approach to behaviour management. We also asked the social workers of young people in alternative placements the same questions about the approach being taken by their carers, to assess whether any elements of alternative positive behaviour strategies were being employed in other types of placement. Although we were unable to assess the extent to which social workers had a detailed knowledge of the day to day care of the young people in alternative placements, their replies do give an indication of the attempts made by carers in other placements to address problems with behaviour, social skills, education and so on. The validity of social worker ratings of carers' parenting style has been demonstrated in previous studies[39].

Table 9.3 compares the proportion reported to be implementing each strategy 'most of the time' in each type of placement.

Table 9.3 Carers' use of behaviour management strategies (per cent) n=126

	MTFC (n=60)	*Other foster care (n=28)*	*Local authority residential (n=17)*	*Other residential (n=21)*
Track when problem behaviour occurs	85	72	82	*95*
Track when positive behaviour occurs	80	67	80	*91*
Set systematic limits to behaviour	83	59	82	*70*
Provide consequences for problem behaviour	77	64	82	*67*
Reward positive behaviour	90	75	88	86
Responds inconsistently to problem behaviour	5	11	6	15

[38] Example provided by Rosemarie Roberts, co-ordinator of the national MTFC implementation team.
[39] For example, ratings of foster carers' parenting style made by social workers have been shown to predict the subsequent breakdown of foster placements (Sinclair *et al*., 2005; Biehal *et al*., 2010a).

There was little apparent difference between carers in MTFC and residential placements in the numbers thought to be employing each strategy 'most of the time', although these strategies appeared to be less common in ordinary foster placements. Factor analysis of the items in the above table produced a factor score that accounted for 43 per cent of the variance between different placement types. When factor scores for the reported use of behaviour management strategies by MTFC carers were compared to those for other foster carers, MTFC carers were found to be significantly more likely to use positive behaviour strategies than other foster carers.

A similar comparison of factor scores for MTFC placements and residential placements revealed no overall difference in the use of some kind of behaviour management strategy[40]. The above responses suggest that some residential homes were similarly focusing on the promotion of positive behaviour, as the MTFC programme does. However, it is likely that the specifics of their approaches differed, as the residential units were likely to be drawing on different programmes or not using a systematic programme at all, instead developing their own approaches. They would not have been using the MTFC points and levels system, which was a key element of the MTFC behaviour strategy, although they may have been using other systems for rewarding positive behaviour.

9.3.2 Work on social and problem-solving skills

MTFC clinical teams employ individual therapists and skills workers who, alongside the foster carers, undertake much of the direct work with young people. All but one of the young people who received MTFC had both a skills trainer and an individual therapist working with them at the time these questionnaires were completed. Other members of the MTFC team also worked with young people to help them improve their social and problem-solving skills. For those not receiving MTFC, social workers reported that the most common sources of support for improving social and problem-solving skills were carers, social workers, staff in residential units and education, CAMHS and YOT staff. The percentage in each placement group who were reported to be receiving 'a great deal' of support with social skills and problem-solving skills is shown in Table 9.4.

[40] Mann–Whitney U test comparing mean factor scores for MTFC and other foster care significant at p=.03.

Table 9.4 Per cent receiving 'a great deal' of support with social and problem-solving skills by group (n=124)

	MTFC (n=58)	*Other foster care (n=28)*	*Local authority residential (n=16)*	*Other residential (n=22)*
Identifying problem behaviours	85	50	88	86
Practising pro-social skills	81	58	88	77
Developing problem solving skills	85	58	75	73

Again, reports from social workers or MTFC staff indicated that MTFC and residential care were significantly more likely to provide interventions of these kinds than other forms of foster care[41].

9.3.3 Support with education

The majority (81 per cent) of the young people on the MTFC programme had a specialist educational support worker attached to the team actively involved in work with them, although carers and other members of the clinical team also provided support in this area. Those who did not enter an MTFC placement were also reported to receive support with education from carers, school staff, social workers, the Looked After Children Education Support teams, educational psychologists and education welfare officers.

Professionals and carers were asked about the extent to which different types of support with education were currently being provided. Where both the social worker/MTFC professional and carer responded the carer's response was used, as carers were likely to be more familiar with young people's day-to-day experiences of education support. Table 9.5 compares the extent to which 'a great deal' of support with education, of different kinds, was provided.

[41] Chi-square test comparing ordinary foster care to MTFC or residential care significant at p<.001 for 'identify problem behaviours', p=.04 for practise pro-social skills, p.03 for develop problem–solving skills.

Table 9.5 Per cent receiving 'a great deal' of support with education n=111-132

	MTFC (n=65)	*Other foster care (n=23)*	*Local authority residential (n=21)*	*Other residential (n=23)*
Help to settle in school	69	47	62	78
Arranging appropriate educational provision	79	67	72	78
Enhancing educational provision	59	30	50	68
Encouraging regular school attendance	87	74	80	87
Advocating for child within the school	75	44	53	55
Encouraging teachers to respond appropriately	67	44	48	73
Encouraging teachers to respond consistently	63	40	40	71
Work on difficulties with learning	63	55	55	63
Systematic tracking of behaviour at school	94	77	61	74
Encouragement to take part in school activities	65	50	67	78
Talking over any difficulties at school	79	48	76	74

Children in other foster placements generally appeared less likely to receive a great deal of direct support with schooling but it is difficult to tell whether this was because they were less likely to need support of this kind or whether their needs were similar but less likely to be met in non-MTFC foster placements. In contrast, many of those in residential care appeared to be relatively well-supported and in some, though not all respects the proportion said to be receiving 'a great deal' of support was not dissimilar to that for children in MTFC. One reason for this relatively high level of support may have been substantial minority of children in residential care who were receiving education on the premises of their residential unit. One-fifth (21 per cent) of those in local authority residential placements and 39 per cent of those out of authority in residential placements were receiving education on the premises of their residential units.

Children in MTFC have daily report cards which are completed by teachers and shown to foster carers every day. For this reason, those receiving MTFC were more likely than the comparison group to have their behaviour at school systematically tracked. When asked about the frequency with which they feedback from schools, MTFC carers were significantly more likely to report that they received daily feedback: 89 per cent did so compared to only 18 per cent of other foster carers and

50 per cent of residential workers[42]. The high proportion of residential staff receiving daily feedback from schools may be due to the fact that, as noted above, some of the young people in residential care were receiving education on the premises of their residential units. Children in MTFC were also significantly more likely than those in other placements to have someone acting as an advocate on their behalf within the school, as a key aspect of the role of education support workers attached to MTFC teams was to work closely with the children's schools.

9.3.4 Work on peer relationships and leisure activities

Another important ingredient of MTFC with adolescents is work to divert young people from negative peer relationships, including relationships with anti-social peers, and to encourage relationships with pro-social peers. The encouragement of positive leisure activities is linked to this, in an attempt to involve young people in activities that are not only pro-social and but also enjoyable and rewarding for the young person. Encouraging young people to engage in positive leisure activities may also help them to broaden their social networks.

Table 9.6 Per cent receiving 'a great deal' of support with peer relationships and leisure activities by group (n=124)

	MTFC (n=58)	*Other foster care (n=28)*	*Local authority residential (n=16)*	*Other residential (n=22)*
Discouraging negative peer relationships	70	56	88	82
Encouraging positive peer relationships	75	68	88	77
Involving the young person in recreational activities	83	69	88	86

Attempts to discourage negative peer relationships were reported more frequently by staff in residential care settings, but there was little apparent difference in emphasis between MTFC and residential care in other respects. As before, social worker reports indicated that an explicit focus on these issues was generally less common in other forms of foster care.

9.3.5 Work with birth families and follow-on carers

One aim of the Oregon MTFC programme's work with adolescents was to return them home after their placement in foster care. The programme uses birth family therapists to work with birth families while young people are in placement and during

[42] Chi-square test of feedback frequency by group significant at $p<0.001$, n=104.

a short aftercare period, in order to increase the likelihood that young people will receive consistent parenting, effective supervision and the positive reinforcement of pro-social behaviours after leaving MTFC. However, much of the Oregon work with adolescents was conducted with young offenders or, in one study, with young people in the state psychiatric hospital. The adolescents with whom it was piloted in England were a quite different group, which included many who had been in care for several years and for whom a return home was not considered to be feasible, or in their best interests. Among the 60 young people on whom MTFC teams returned questionnaires during the early stages of placement, only eight (14 per cent) were expected to return to live with their birth families. The plan for the majority of them (58 per cent) was for them to move to new, long-term, care placement. For the remainder the plan was either a move to independent living (five per cent) or not yet known at this stage or to (23 per cent).

The focus of the work of the birth family therapists in England was therefore somewhat different. Where there was no plan for young people to return home, work on parenting strategies was undertaken, where possible, with identified 'follow-on' foster carers. Where appropriate, work was also undertaken with birth parents to improve the quality of contact and in some cases to increase the frequency of contact. As Table 9.7 shows, MTFC teams undertook work to increase the quality of contact between young people and birth families in 75 per cent of cases. Work to increase the level of contact was undertaken in fewer cases, possibly because young people and/or professionals considered that the current level of contact was sufficient or appropriate.

Table 9.7 Per cent receiving family interventions by group (n=125)

	MTFC (n=58)	*Other foster care (n=28)*	*Local authority residential (n=17)*	*Other residential (n=22)*
Work to increase level of contact	53	21	35	41
Work to improve quality of contact	75	43	53	50
Work on parenting strategies with family	52	19	18	24

Work on teaching parenting skills, was more commonly undertaken with parents of young people in MTFC than in other placements which was unsurprising, as this work is a key element of the MTFC programme.

9.3.6 Support from child psychiatrists and psychologists

In some areas, psychiatrists offered regular consultation to MTFC clinical teams. In the early stages of placement in MTFC, one-third of the young people received help from a psychiatrist. The same proportion of young people in out of authority residential care also had some input from a psychiatrist, but only 12 per cent of those in local authority residential placements received this and four per cent of those in other foster placements. These differences may reflect differences in need between the groups, or differences in the level of support provided to children in different placements.

Nearly half (48 per cent) of the young people were receiving help from a clinical psychologist. This was a far higher proportion than those in out of authority residential placements (19 per cent), local authority residential placements (12 per cent) received or other foster placements (two per cent). One reason for this is that MTFC teams normally employ a clinical psychologist to take one of the roles on the staff team (often the Programme Supervisor). However, although they draw on their expertise in clinical psychology,for example in when conducting assessments, these staff do not provide traditional clinical psychology services as they have a different role within the team.

9.4 Summary

About half of the total Cape sample entered MTFC for at least a day, about a third had residential care as their index placement and just under a fifth had normal foster care. Those who were in the MTFC group moved at the baseline date by definition but for those in the comparison group about half did not move placements at baseline.

The purpose of the index placement differed between the groups. For the majority of cases the purpose of MTFC was to change the young person in some way. In contrast the purpose of the majority of the comparison placements was to provide a long term home, something that MTFC was not designed to do.

The support reported by the MTFC in terms of behaviour, social skills, education and therapy was consistent with the model. On the surface, there was a lot of similarity between the support available in MTFC and in residential care, particularly in education and behaviour management. The greatest contrast was with ordinary foster care where the structured programmes of support were not available. MTFC was more likely than other placements to be working with families and to have the involvement of clinical psychologists.

Chapter 10 Delivering MTFC: Treatment Fidelity and Support to Carers

This chapter focuses on the views of the teams and foster carers delivering the MTFC programme. It first discusses the MTFC teams' assessment of treatment fidelity and then presents the foster carers' accounts of their experience of MTFC training and support.

10.1 Fidelity to the MTFC model

The national implementation team sought to ensure programme fidelity across the 18 sites. This was jointly monitored by the national team and the OSLC, who used video review of clinical meetings, consultation telephone calls, site visits and full reviews to assess the extent to which individual teams were delivering the programme as intended. The national team's assessments of programme fidelity indicated that, for nearly half of the teams, this varied over time[43]. Much depended on changes in staffing, particularly changes of Programme Supervisors, which could enhance or weaken treatment fidelity. Fidelity could also improve as teams gained experience in delivering the programme or weaken when teams or local authorities introduced adaptations to the model, against the advice of the national team. In some cases, teams left the national MTFC programme because they wished to maintain these local adaptations. Information provided by the national team indicates that they assessed fidelity to the model to be 'high' for only one-third of the teams, although for half of the teams it was considered either 'high' or good' for at least some periods of time during the evaluation. For one-third of the teams, the national team rated fidelity as 'low' or 'very low' for some, or all, of the duration of the evaluation and ten teams were considered to show only moderate fidelity for some, or all, of this period.

This variability in programme fidelity raises important questions for evaluation. When rolled out into 'real world' settings, evidence-based programmes are unlikely to be delivered with the same fidelity achieved when tested by the programme developers in more controlled conditions. A high level of overall fidelity may be particularly difficult to achieve when, as in the case of MTFC, a national pilot programme is rolled out in multiple agencies around the country, each of which is operationally distinct. The operation of such programmes at local level is inevitably shaped by the contexts in which they are delivered, including local policy and resource contexts, and by the managers and staff responsible for their implementation. However, it is in precisely these contexts and circumstances that evidence-based programmes will be used and it is therefore essential to test their usefulness in such 'real world' settings. For this

[43] Information on variations in treatment fidelity between the teams provided by Rosemarie Roberts, co-ordinator of the national implementation team.

reason, this evaluation was designed as a 'pragmatic' trial, that is, one which evaluates a programme's effectiveness in the context of a 'real world' implementation. In this, it serves the same purpose as all pragmatic or 'effectiveness' trials across health and social care. However it should therefore be noted that the outcomes presented in the next section of this report refer to MTFC as delivered in this real world context and not to a theoretically 'pure' model of the programme.

The evaluation team were not in a position to directly assess fidelity to the MTFC programme themselves, but did ask MTFC teams some questions about aspects of programme fidelity. Around three months after the young people entered their foster placements, we asked teams about the delivery of the programme to the young person on whom they were completing a postal questionnaire. We included questions about the extent to which the young person's foster carer was delivering the intervention as specified in the MTFC manual. These questionnaires on treatment fidelity were returned in relation to just under half (49) of the young people who entered MTFC placements and were completed by staff from 16 MTFC teams. Each team returned between one and eight questionnaires. Since the questionnaires were completed around three months after each individual entered the programme, for teams returning more than one questionnaire the successive questionnaires covered a series of different time-points in the life of the team and therefore serve as a series of snapshots of different teams across a three-year period.

These questionnaires could not provide a comprehensive picture of treatment fidelity for each MTFC team, not least because they relied on self-assessment by the MTFC teams themselves. Similarly, we were obliged to rely on the Programme Supervisors' ratings of carer fidelity. There are potential limitations to the validity of such ratings. If more inexperienced or unskilled Programme Supervisors were themselves not following the MTFC model as faithfully as they should, then they may not have provided appropriate guidance to the carers on the programme and it is possible that some of their ratings of carer fidelity may not have been strictly in accordance with the original MTFC model. However, while these ratings may not always have reflected fidelity to a 'pure' model of MTFC, they do indicate whether or not programme staff were satisfied with the carers' performance in delivering a 'real world' version of the model.

10.1.1 Frequency of clinical team and foster carer meetings

Weekly meetings of the clinical team are specified in the MTFC manual as an essential component of the programme. Drawing on data from the Parent Daily Report (PDR) telephone calls from foster carers during the previous week as well as on other verbal reports from carers and professionals, these meetings are used to review each child's progress, identify any problems and, if necessary, modify the young people's individual behaviour management plans. Clinical team meetings also

look at what is working well and plan tasks for team members for the following week. Weekly meetings between members of the clinical team (usually the Programme Supervisor and the foster carer recruiter/supporter) and the foster carer group are also a requirement of the MTFC programme. These provide an opportunity to discuss progress and make any necessary changes to each young person's plan, as well as providing group-based supervision to complement the daily contact between team staff and individual foster carers.

Since these weekly meetings are requirements of the MTFC programme, our questionnaires to MTFC teams asked how many had taken place in the previous six weeks. In all but one case, MTFC staff reported that five or more clinical meetings had been held during this six week period, in which the young person's progress had been reviewed and points and levels adjusted accordingly. In 84 per cent of cases, five or more foster carer meetings had also taken place during the previous six weeks. Three-quarters of the foster carers concerned had attended all their weekly foster carer meetings. The reasons given for non-attendance were annual leave, sickness, training and the young person being out of school and therefore needing supervision.

10.1.2 Staffing of the MTFC team

The multi-dimensional nature of MTFC requires a team with a variety of skills, undertaking a variety of complementary roles. Thirteen of the 16 MTFC teams who returned questionnaires indicated that they were not fully staffed at the time they completed one or more of the questionnaires. The lack of a full staffing complement may have implications for the quality of the intervention, although we were unable to test this. When asked what, if anything, had hampered the work of the team, five MTFC staff noted difficulties with vacant posts. One MTFC team member reported multiple vacancies at the time one young person's questionnaire was completed: 'No therapist, no programme supervisor, no team manager, no clinical input at all.' In these circumstances, the young person concerned could not be said to be receiving MTFC at that point in time.

Where more than one questionnaire was returned by a team, it was clear that specific gaps in the staff team shifted over time. This series of snapshots of staffing across the teams indicated that in most cases programme supervisors, individual therapists and skills trainers were in post (90-96 per cent of questionnaires returned). Posts for programme managers and birth family therapists were somewhat less likely to be filled (78–82 per cent were in post at the time the questionnaires were completed). The most common gaps in team membership concerned psychiatric consultation, which was available at the time the questionnaires were completed in relation to only 39 per cent of the young people. When asked to account for any gaps

in staffing, MTFC teams reported that these were due to difficulties in recruitment and to staff sickness.

10.1.3 Respite care

Given the intensive and challenging work undertaken by MTFC foster carers, the MTFC programme stipulates that trained respite carers should be available to provide weekend respite to carers. Many of the teams aimed to provide respite care every six weeks. Sometimes teams had difficulties in recruiting sufficient carers to provide respite as often as this. However, the majority (91 per cent) of the questionnaires returned indicated that respite carers were in place at the time these questionnaires were completed. As with the staffing of the clinical team, this was a situation that could shift over time.

10.1.4 Carers' implementation of the model

MTFC teams were also asked to rate carers on their use of the Parent Daily Report (PDR), the points and levels system, and on other aspects of the model in relation to the individual young people on whom these questionnaire was returned. The PDR is a telephone questionnaire. Foster carers are telephoned daily by the PDR caller on the team and asked to respond to a set of standard questions. They must list any problematic behaviours and also report on whether these were stressful to deal with. MTFC teams use the PDR system to monitor both young person's progress and the carer's fidelity to the model on a daily basis, and the system also provides a regular opportunity to provide support and supervision to carers. The MTFC teams reported that, for the 49 young people on whom questionnaires were returned at this stage, foster carers completed the PDR on a daily basis in 91 per cent of cases and on most days for the remaining 9 per cent of the young people.

The points and levels system, described in Chapter 2 and in the previous chapter, was being used for all but one of the young people on the programme, and in the majority of cases it was being used daily. The points and levels system plays an integral part in the carers' development of warm and positive relationships with the young people, depersonalising the disciplinary aspects of the programme by displacing them to a 'system'. Forty (85 per cent) of the young people were thought to understand the points and levels system very well. Points and levels were thought to work very well for 28 (58 per cent) of the young people, including three young people whose placements had already disrupted. This system was thought to be working 'to some extent' for most others (15, 31 per cent) but not very well in a minority of cases (four young people, eight per cent).

Where the points and levels system was not working as effectively as it should with any specific young person, MTFC teams gave a variety of explanations as to why this was so. In some cases, they thought the young people were not motivated by the rewards or found them too controlling. They refused to engage, or played the system so that they only did what was needed to remain on their current level. Others became too anxious or too angry to respond to the expectations. The teams also reported that sometimes carers were not consistent in implementing the points.

The MTFC teams were also asked to rate the fidelity of foster carers to other key elements of the model, as shown in table 10.1.

Table 10.1 Implementation of the model by foster carers per cent n=49

	Very well	*To some extent*	*Not very well*	*Not at all*
Implements the daily behaviour management programme	78	16	2	2
Teaches appropriate skills	67	29	4	0
Uses the points and levels system	81	17	2	0
Uses the PDR reporting system	92	6	2	0
Systematically monitors child's daily activities	84	16	0	0
Reinforces desired behaviours/attitudes	80	20	0	0
Provides consistent supervision	92	8	0	0

The above variables were combined into a single measure. Analysis of reliability indicated that the internal consistency of this measure was good. In other words, the various questions appeared to be measuring a single phenomenon, namely, carer fidelity to the MTFC model (as reported by MTFC teams)[44]. An overall rating was calculated, which indicated that, in relation to 87 per cent of the young people on whom questionnaires were returned at this stage, foster carers were reported to be implementing the model very well.

We asked teams to note on their questionnaires any aspects of the foster carers' practice that were inconsistent with the MTFC model. Their answers provide a snapshot of some of the implementation difficulties that may occur, despite the close supervision provided by the clinical teams. In several cases, the team's concerns related to the carers' difficulties in responding appropriately to young people's behaviour and their inconsistent use of the points and levels system:

[44] Cronbach's alpha 0.84.

The carer implements the MTFC model but sometimes finds it difficult not to respond to some of the behaviours presented. We are supporting the carer with the difficulties.

At points of crisis, points and levels issue could get lost. Child frequently absconding so losing high number of points.

Some directives from the Programme Supervisor are not implemented. Behaviours which are problematic are allowed to continue without points being taken or other sanctions recommended i.e. time-out. Carers are focused on the negative and have difficulty acknowledging the positive of the young person.

The other main problem cited was particular foster carers' unwillingness to accept the authority of the team and work consistently to the agreed plan for the young person. A few of the carers recruited appeared to be particularly uncooperative:

Carer is not supportive of the work for the clinical team. Negative and critical of the young person.

The foster carer is reluctant to schedule work with team.....Critical and mean to most staff members at some point during placement which has created a reluctance to call or go to the house. ....PDR calls are sporadic as the PDR caller can rarely get a hold of the foster carer and she doesn't return her messages.

Carer schedules lots of extra-curricular activities for young person, creating difficulties for skills worker and individual therapist trying to see him.

Carer changed privileges, added privileges, made special rules. Young person has slept at boyfriends house and he has slept at carers - all without consent/consultation with the team.

Despite problems of these kinds in some cases, in the majority of cases reports from MTFC teams indicated that carers were implementing the model well, as we have seen. Treatment fidelity may vary over time, as staff gain experience in implementing the model or, alternatively, attempt to introduce modifications to it despite the risk that the resulting programme delivery may become 'off model'. Treatment fidelity may also fluctuate as a result of staff and carer turnover or recruitment difficulties, which can leave teams without a full complement of staff or respite foster carers. These problems, which could make it difficult for some teams to deliver the intervention as

intended for certain periods of time, are likely to arise in the implementation of any intervention.

10.2 Carer views of training and support

Approximately three months after the young people entered their MTFC placements, questionnaires were completed by foster carers in relation to just over half (55) of all MTFC cases. Questionnaires were returned by MTFC carers from all areas piloting the programme, with the number of questionnaires returned per site ranging from one to seven. We asked the MTFC carers for their views on training and support they received from the MTFC teams.

The MTFC teams used the training manual produced by the Oregon Social Learning Centre to train foster carers in operating the MTFC model. Initial training is provided to introduce them to the positive ethos of the model and the practical tools of the programme, but training and development continue during the weekly meetings with foster carers. Through close ongoing support during the implementation of the programme, foster carers develop their skills in implementing the programme. MTFC foster carers were also expected to participate in ongoing training provided by their local authorities for all foster carers.

We asked carers whether they felt that the training they had received in MTFC had prepared them sufficiently for the work they were doing. Of the 36 responses to this question, 30 were positive. Of the 30 who responded positively, roughly half were unequivocally positive about the training. A few singled out particular aspects of the training that they had valued:

> *Yes, especially about "Climbing Mountain". If, when faced with a problem you might want to confront the young person and have your say, I was taught to "let the points do the talking" and this has relieved a lot of the stress. ..... the points system is what has been missing for a lot of young people.*
>
> *Yes, training excellent. Long process - very interesting, very detailed. Attachment interesting.*
>
> *Yes, initial training was fantastic, in fact anything that creeps up and anything not foreseen they immediately try and look around for something to address that, so offered ongoing training.*

Others were equally positive about the training, but were very clear that there were limits to the extent to which any training could have prepared them for the reality of fostering these children in practice. The similarity of their comments on this point was

striking. Eight carers emphasised that although they found the training excellent, essentially they felt that 'no training can prepare you for this job.' They explained:

> *Excellent training received, but I don't think that anything can prepare sufficiently for the intense involvement with the kids, although very rewarding job.*

> *Training just can't prepare you totally for a child placement. That's no fault of the training we were given.*

> *Overall have received good training, although no amount of training can prepare for this role.*

> *I don't think they could have done more but I do feel that until you have the child you don't have much conception of what it's like – e.g. in our case the intensity rather than the challenging behaviour.*

> *You can learn all the legal requirements but when you are faced with a young person who puts his fist through the window you've got to go with your instincts.*

The initial shock at the reality of caring for very challenging children may have been to some extent due to the fact that for many of the MTFC carers, this was their first experience of being a foster carer. Although some of the carers recruited were not existing foster carers, they often had had prior experience in working with children and young people in another role, for example in youth and community work. Nevertheless, a few mentioned that the lack of prior experience of fostering was a difficulty, despite the perceived excellence of the training:

> *Yes good (training), well written, practice sessions. It was as good as it could get. Hard though, because we were new carers with no experience.*

Carers also received other training they found helpful, in addition to the core training in the MTFC model, although this was not always well-timed:

> *Have had extra specialist training arranged by MTFC – self-harm, first aid, dealing with difficult behaviour, attachment, abused and neglected children. The higher level training additional to MTFC was very good - MTFC training equips you to deal with behaviour and traits, but other training has given us extra skills and insight.*

> *Yes, initial training fantastic in fact anything that creeps up and anything not foreseen they immediately try and look around for something to address that so offered training ongoing.*

When child was first placed, I hadn't done the restraint training. I haven't had any "I assert" training i.e. on how to talk to a child when he's angry. It was more support than training.

Although generally positive about the training they had received, six other carers felt that they had been insufficiently prepared for the impact of some of the extreme behaviours displayed by challenging children and their parents:

Was specific about the treatment and project - clear and understood. But does not give you enough about the behaviours and impact on you and the family.

No, nothing can prepare you for the violent and aggressive behaviour and trashing your home.

At least half of the six negative responses were evidently the product of hindsight, following experiences in practice that the carer had found difficult to manage. Two had some direct criticisms of the content of the MTFC training they had received. As this study was not an evaluation of the training programme, we cannot comment on whether the problems reported were problems with the MTFC training in itself or problems with the way in which training was delivered at certain of the pilot sites.

Training was a good overview but unclear and not very well structured - not sequential and not very interactive but a lot of being talked at. It's very Americanised and hasn't been adapted for the UK. Would have liked more practice doing the points.

Shows you how to run the programme but not how the children react to the problem..... Biological effects and how children work, what causes behaviour, etc.

We also asked foster carers about the support they had received from the MTFC teams and received 35 responses to this question. Of these, 21 were very positive, nine were both positive and negative and five were negative about the support received. The majority of carers were extremely appreciative of the support they were receiving from the teams:

Yes, we are very impressed with the support from the whole team. Regular meetings, reports and feedback mean we feel very much part of the focussed team.

Helped on everything. Worked better than any other care system - dealt with on a daily basis. Fresh start every day - what children need.

A few, who had been foster carers before, made favourable comparisons with their previous experiences. Many were particularly appreciative of the 24 hour a day support available from the MTFC teams.

> *There's always someone there, even out of hours. I've got mobile numbers to ring and they're always ready and willing to help.*

> *Back up is good - 24 hour contact if you need it. They're there when they're needed.*

> *They've been brilliant. Call every day three or four times. PDR very, very supportive. Weekly meetings.*

> *The hardest issue is when you feel a need to hit out. They're always at the end of the phone.*

Some of the more negative comments reflected situations where MTFC teams were newly-established and therefore inexperienced or appeared to be malfunctioning in some way, sometimes because of staff shortages.

> *Overall support is great…But it's a new team and not effective yet - not having clear treatment goals, e.g. expecting foster carers to decide on how to implement plans for "learning opportunities".*

> *There was support at the beginning, it was very intense. Then no contact with the national team. Then the programme supervisor left. There was nobody on the team to contact.*

One or two believed that the financial incentives to make placements work negatively affected decision making, for example:

> *I felt as though the "team" had to make this placement work for financial reasons. Only when I gave notice on him did the team jump through hoops.*

The issue that emerged as the strongest potential ‘learning’ point was the need for teams to remember and respect the expertise of carers, and to avoid becoming too overbearing or patronising in their support, though they could get this wrong in both directions. One carer, with previous foster care experience, felt that the team did not give her enough credit for the understanding she had of the young person and another, who was new to fostering, felt that the team had assumed knowledge that she did not have.

Enough (support). Too many professionals involved. They think sometimes that we do not get in touch with them enough. Some situations we feel are not that bad to phone. Undermines us as carers sometimes.

Feel supported most of the time. They sometimes need to recognise carer skills a bit more. Sometimes on a daily basis, although professionals are trained and know what they are doing, I feel that my time spent with young person sometimes gives me more insight into this young person and her needs than I was given credit for. Gut feelings have often been right.

Yes, I feel sometimes they have tried to prepare you because they have knowledge, assumption is that I have as well. Not coming from this background, my awareness is less than assumed.

10.3 Summary

From the reports of the MTFC teams on just under half of the young people who received MTFC, it appeared that team fidelity to the structural aspects of MTFC model in the early months of placement was good in most cases. These reports indicated that the teams were, for the most part, holding the required clinical team and foster carer meetings on a weekly basis and, at the time these questionnaires were completed, they usually had respite carers in place. However, problems with staff recruitment posed challenges to fidelity, if key staff were unavailable to deliver specific aspects of the model. In the majority of cases, the teams considered that foster carers were delivering the model as intended, although perhaps inevitably there were problems with the performance of a few foster carers.

The MTFC foster carers who were surveyed in the early stages of placement was for the most part appreciative of the training they had received, although a substantial minority felt that no training could fully prepare them for the reality of caring for very challenging children. Many carers had no previous experience of foster care, which may have made their initial adjustment to fostering more difficult. Most carers spoke very highly of the intensive support they received, although a minority had some criticisms.

Section 4: Results

Chapter 11 Placements and Stability from Baseline to Follow-up

This chapter explores the circumstances of the young people in the MTFC and comparison groups one year after baseline[45]. In particular, we have looked at where they were living at follow-up and the stability of their placements. As in the next chapter, we have pooled the RCT and observational samples. We will refer to this combined group as the total MTFC group and compare all of those who received treatment foster care (n=106) with those who did not (that is, the total comparison group n=113[46]).

For both the total MTFC group and those in the comparison group who had moved to a new index placement, the follow-up date was one year after the date they moved to this index placement. However, since 59 per cent (67) of the young people in the comparison group did not move to a new placement in the first three months after first data collection, as discussed in Chapter 9, the follow-up date for these 'non-movers' was one year after the point of baseline data collection.

The OSLC juvenile justice programme expected young people to stay on the programme for at least 6 months. Given the different circumstances of the looked after young people on the English MTFC-A programme, the national implementation team expected them to remain on the programme longer, for between nine and 12 months. The national team's programme audit distinguished between early leavers, who left within three months, and those who remained on the programme for three months or more, for whom they anticipated that there would be a treatment effect. In some of the analyses that follow, therefore, we examine the circumstances of those who remained on the programme for a minimum of three months, for whom some treatment effect might be observed.

11.1 Care status the follow-up

The majority of young people had been continuously looked after by the local authority over the follow-up period. Five per cent had ceased to be looked after at some point during the year but all but one of these had subsequently re-entered care.

[45] The baseline data collected at the baseline date for the whole sample referred to the six month period prior to that date and, for those who moved to a new index placement, to the placement just prior to this move.

[46] Of the total cape sample (n=219), 106 entered MTFC and 113 made use of the usual care placements. Due to sample attrition the majority of data in this chapter relates to 214 cases that participated at follow-up (104 had entered MTFC, 106 had not), however, some follow-up data on those cases lost to follow-up was available through discussions with the social worker or MTFC team and has been included in some analysis, hence any discrepancy in numbers.

A further 15 per cent of young people were care leavers at follow-up, that is to say they had moved on from their last care placement but were continuing to receive support from the local authority under the Children Leaving Care Act 2000.

In the USA, MTFC programmes for adolescents in the juvenile justice system have focused on training parents so that they could continue the behavioural programme when the young people returned home. The population at whom the English MTFC-A programme is targeted is very different, as most of the young people have been looked after for several years and in most cases reunification with parents is not the plan. For teams operating the MTFC-A programme, therefore, work with follow-on carers was often undertaken instead of work with birth families to prepare for the young person's next and, it was hoped, long-term placement. This meant that MTFC teams sought to identify follow-on carers early on in the placement.

11.2 Placement at one year follow-up

Since young people were expected to remain on the English MTFC-A programme for nine to 12 months, many of the sample were still in their MTFC placements at one-year follow-up. Just under half of them were still living in their MTFC placements at this point. A small number of those who were still in MTFC (approximately seven per cent) were, however, no longer on the programme. This occurred when the local MTFC programme had closed and the young person remained with their MTFC carer, or where the young person and their carer had chosen to leave the MTFC programme together and the placement had been converted to a normal foster placement with a plan for the young person to remain there. Such instances, particularly the latter, could be viewed as a positive outcome for the young person in that they had clearly developed a positive relationship with their carer and had potentially found a long-term, stable placement. Of course, this carried resource implications for the MTFC programme, which had consequently lost a trained MTFC carer.

Of those who had left MTFC, over one-third were living in family settings, either in other foster placements or with relatives. A further 15 per cent were in independent or semi-independent accommodation. One-half of those who had left MTFC were in residential placements by follow-up. Excluding those who were still in MTFC the proportions in each of the other types of care placements were very similar between the total MTFC group and the total comparison group.

Table 11.1 Total sample: follow-up placement for those who received or did not receive MTFC n (per cent) n=210

Placement type	*Total MTFC group* n=105	*Total comparison group* n=105	*Total sample* n=210
MTFC	50 (48)	0	50 (24)
Other foster care	14 (13)	29 (28)	43 (21)
With parents or relatives	5 (5)	10 (10)	15 (7)
Residential care (local authority)	12 (11)	19 (18)	31 (15)
Residential care (other) of which:[47]	16 (15)	33 (31)	49 (23)
• *Independent/voluntary sector*	3 (3)	21 (20)	27 (13)
• *Residential school*	3 (3)	6 (5)	8 (4)
• *Secure unit*	3 (3)	2 (2)	5 (2)
• *Other residential*	5 (7)	4 (4)	9 (4)
Other	8 (8)	14 (11)	20 (10)

Among those who left MTFC, 25 per cent moved to other foster placements and 22 per cent moved to local children's homes, in some cases because foster placements could not be found for them. Just nine per cent of the MTFC group moved to parents or relatives. A further 29 per cent, typically those whose MTFC placements had disrupted, moved to out-of-authority residential placements, and a few moved to semi -independent living, having aged out of care.

11.3 Placement stability over the follow-up

In addition to movement out of care, there was evidence of placement movement within care. Almost half (48 per cent, n=103) of the total CaPE follow-up sample had moved from their index placement during the 12 month follow-up. This included three young people who had moved within the MTFC programme from one MTFC carer to another. The average number of placement moves for the total CaPE sample was 1.14 with the number of moves ranging from none to 13 moves for one 16 year old. This young person had experienced a considerable degree of instability having moved from his MTFC placement after four months to independent living, which had included hostels, bed and breakfast accommodation, interspersed with returns to relatives.

[47] In Table 11.1, 'other residential' includes independent units, therapeutic units, residential schools and secure units. 'Other' includes young people who were ageing out of care and living in various types of independent or semi-independent living, plus two in a Young Offenders Institution.

Table 11.2 Moved from index placement over follow-up n=214 (per cent)

Index placement ended	*Total MTFC group* n=106[48]	*Total comparison group* n=108	*Total CaPE sample* n=214
No	49 (46)	62 (57)	111 (52)
Yes	57 (54)	46 (43)	103 (48)

Of course, some placement movement over the follow-up was expected given the time-limited nature of the MTFC intervention, as MTFC placements are not intended to be long-term placements but rather, to help young people achieve stability in their next placement. As Table 11.2 suggests, slightly more young people in the total MTFC group had moved from their index placement over the follow-up when compared to young people who had not used MTFC, although, statistically there was no significant difference between the groups[49]. However, the comparison group had a higher proportion of young people who were ageing out of care and once age was taken in to account, a significant difference was found[50].

In addition to the move from the index placement, there was evidence of subsequent placement moves over the follow-up period (that is, moves in addition to the move from index placement), with 26 per cent of the total CaPE sample having moved on more than one occasion.

An initial aim of the MTFC pilot programme was to enable young people who had experienced multiple placement moves to achieve greater stability. Looking only at those who had moved (n=103), we found no evidence that young people who had left MTFC subsequently moved more or less than those who had left the usual range of placements. Taking into account the amount of time available for subsequent moves, there was no significant difference between the groups (mean of 169 days per subsequent move and 154 days per subsequent move[51]). However, it is likely that the study's short follow-up timeframe (one year from entry to placement/ randomisation to a placement) meant that it was too soon to tell whether MTFC was having any impact on stability in care, particularly as around half of young people had not moved from their MTFC placement by this point. A further follow-up is therefore needed to assess the effects of the MTFC-A programme on placement stability.

[48] One young person the observational sample who was in TAU at baseline subsequently entered MTFC and was included in the MTFC group for all outcome analyses.
[49] Pearson Chi-Square (1) 2.679 p=.103 ns.
[50] A logistic regression showed that both age (p=0.001) and whether received MTFC (p=0.004) predicted whether they had moved from their index placement.
[51] A t test carried out to compare the mean number of subsequent placement moves for those who had received MTFC and those who had not showed no difference between the groups. P=.565ns.

11.4 Duration of index placement

The duration of the index placement over the follow-up for all those who moved at baseline was very similar between the groups (total MTFC: n=106 mean= 263; total comparison: n=39, mean= 267 days). For those in the comparison group who had not moved at baseline the mean time in their index placement by follow-up was 431 days. For those who had left MTFC, our initial analysis indicated that the type of follow-on placement was significantly associated with the amount of time spent in the MTFC placement [52].

Those who moved on to foster placements had typically remained longer in MTFC, as had those who moved to local authority residential placements. Most of these young people had settled in MTFC and it seems likely that this had afforded time to enable a planned move from there into another local authority placement.

Table 11.3 Total sample: mean days in MTFC by placement at follow-up n=53

Follow-up placement	*Mean days in MTFC*	*Range (days)*
Foster care (n=14)	227	68-348
Local authority residential care (n=11)	226	9-343
Parents or relatives (n=4)	185	133-315
Other residential care (n=16) of which:	92	14-189
Secure accommodation (n=4)	101.75	11-269
Other	109	18-210

With the exception of one child, who had moved to a local residential unit when his MTFC placement disrupted within nine days, all of those who moved on to local authority residential homes had spent between five and 11 months in MTFC.

Decisions about placements may be driven not only by individual placement needs but also by the availability of resources. In a number of cases a shortage of ordinary foster placements meant that a follow-on placement in a family setting could not be found, so some young people were moved to local authority residential units instead. As noted in the previous chapter the local context, including the local resource context, could influence programme delivery. Clearly, the local resource context could also shape programme outcomes in respect of the type of placement young people moved to once they left the programme, as this would depend on the types of placement available.

[52] Kruskall-Wallis test for placement type by days in index placement significant at p=.001. A logistic regression showed that time in index placement predicted use of out of authority residential care (p=0.03), while taking account of both use of out of authority residential care at baseline (p<0.001) and age (p=0.64).

For young people whose MTFC placements disrupted at an early stage there might not have been an opportunity to make a planned placement move, or a local placement may not have been available at short notice, and this may account for some of the moves to out of authority residential placements[53]. Alternatively it may be that for those who disrupted early there was a feeling that the young person's problems justified an expensive and specialist resource. There was also one young person who had been in secure accommodation prior to entry to MTFC and who returned to this secure unit when she breached the terms of her licence.

11.5 Reasons for the ending of the index placement

11.5.1 Graduating from MTFC

Information on the leaving status of the young people in the total MTFC group who had moved over the follow-up period was gathered from the national implementation team. Of the 57 young people who had moved from their MTFC index placement almost half (45 per cent) were classed as graduates of the programme using the OSLC criteria (that is, completing their individual points and levels programme and moving to a community placement, such as foster care, family or independent living).

As Table 11.4 shows, around one-third of the group were early leavers, having left the programme within three months, whilst one in five were late leavers who had stayed on the programme for more than three months but had not graduated, according to the OSLC criteria.

11.4 Programme leaving status for those who's MTFC placement ended over the follow-up (n=57)

Leaver status	*Number*	*Per cent*
Early Leaver	17	35
Graduated	22	45
Late Leaver	10	20
Missing data	8	14

11.5.2 Planned placement endings and placement disruption

[53] This is supported by our data on reason for placement ending, although the numbers are too small to look at significance. Of the MTFC cases who were in out of authority care at follow-up 88 per cent (7/8) had disrupted rather than had a planned placement end. Of those who were in foster care or local residential care 68 per cent (15/22) had disrupted.

Social workers and MTFC teams were asked to indicate whether the index placement ending had been planned or whether the placement had disrupted. Information on the reason for placement ending was available for 71 of 103 young people whose index placement ended during the follow-up period[54]. Only 24 of these (34 per cent) had planned placement endings during the year. The total MTFC group and the total comparison group were very similar in the proportions that had planned placement endings[55].

Table 11.5 Total CaPE sample: reason for placement ending n=71 (per cent)

Reason for placement breakdown	*Received MTFC* n=38	*Total comparison group* n=33
Planned placement ending	12 (32)	12 (36)
Placement disruption	26 (68)	21 (64)

Within the total MTFC group those who had placement disruptions had, on average, been in placement for less time than those who had planned placement moves but the difference was not significant (planned: mean =230 days (101-320) compared to disruption: mean=189 days (11-348)[56]. In the total comparison group there was very little difference in the time in placement for those who had disruptions and those who had planned endings, for both groups the mean was more than a year due to the large number who had not moved at baseline (planned: mean= 420 (23-1327) compared to disruption: mean=431 (51-1742).

For the CaPE sample as a whole, planned placement endings were often due to the placement being a temporary placement, although planned endings also came about as a result of an assessment that the placement was not suitable for the young person or when a young person requested a move.

Qualitative data suggests the placement disruptions, meanwhile, were mostly due to behaviour problems. In some cases there were ongoing difficulties including absconding, whilst in others, one-off violent incidents had led to a sudden placement end. Statistically, however, being rated as anti-social at baseline[57] or being an

[54] We have information on the reason for leaving index placement for 67 per cent (38/57) of those who received MTFC and left before a year and 72 per cent of the comparison group who left their index placement before T3 (33/46).
[55] A chi-square test showed there is no difference between the groups.
[56] Kruskall-Wallis test for reason for placement breakdown by days in index placement not significant (p=0.24).
[57] Young people were rated as anti-social if they scored three or four on the HoNOSCA anti-social subscale.

offender at baseline did not appear to be significant predictors of placement disruptions[58].

Offending over the follow-up period was more common in those who had placement disruptions (n=20, 39 per cent), than those who had planned placement endings (n=8, 23 per cent) but the difference was not significant[59].In a few cases the placement disrupted because the young person was sentenced by the courts to another placement.

Placement disruptions in MTFC were mainly attributed to difficult behaviour that caused safety concerns or absconding. For example, in one case:

> *The young person tried to run away with a boyfriend - the police were called - there was an altercation with foster carer which descended with threats of violence from the young person and accusation of abuse.*

A poor match between the foster carer and the young person, or inexperienced foster carers, could also lead to disruptions:

> *Intensity of behaviours too high for carers to manage. Primary carer was male and child wanted female carer predominantly. Carers not experienced enough to have developed sufficient resilience and coping strategies.*

Some disruptions occurred because the young person did not like or adapt to the programme and therefore opted out:

> *He absconded to his grandparents and refused to return. He said the TFC placement was 'taking advantage of him'. He seemed to resent the points system and to feel he was always in the wrong and the carers right.*

In two cases, placements had disrupted because the young people were remanded to secure placements. In others cases, the influence of both contributed to the placement disruption, as documented in Chapter 15.

11.6 Comparing placements at baseline and follow-up

We then looked at whether young people in the total MTFC group were any more likely to be living in a family setting by follow-up, as opposed to residential care,

[58] A logistic regression including age, receiving MTFC, anti-social at baseline and offending at baseline showed no significant predictors of placement disruption. This was the case still when predictors were added step-wise.
[59] Chi-square p=0.13.

compared to their situation at baseline. We found there was a reduction in the use of residential care among those who received MTFC. Among those in the MTFC group who had been in residential placements at baseline nearly half (n=23) were living in a foster placement (MTFC or ordinary) or with relatives by follow-up. Among those who had been in foster care at baseline, 82 per cent (n=42) were living in the community, either in MTFC or other foster placements or with relatives. However, the reduction in the use of residential care was partly due to some young people still being in MTFC at follow-up and partly due to those who were getting older moving to independence.

Table 11.6 Received MTFC: placement at baseline by placement at follow-up n (per cent of those in each placement type at baseline) n=105

	Placement at baseline			
Placement at follow-up	*Foster care*	*Local residential*	*Other residential*	*Parent/ relatives*
MTFC	29 (57)	14 (52)	5 (23)	2 (40)
Foster care	10 (20)	1 (4)	1 (5)	2 (40)
With parents or relatives	3 (6)	0	2 (9)	0
Residential care (local authority)	4 (8)	6 (22)	1 (5)	1 (20)
Residential care (other)	2 (4)	5 (19)	9 (41)	0
Other	3 (6)	1 (4)	4 (18)	0
Total	51 (100)	27 (100)	22 (100)	5 (100)

Among the young people who had left the MTFC programme by follow-up, two-thirds (n=21) of those young people who had entered MTFC from a residential setting had returned to a residential placement within one year of entering MTFC.

Among those in foster care at baseline (and no longer in their MTFC placement by follow-up), nearly 60 per cent (n=13) returned to live in an ordinary foster placement after leaving their MTFC placement and nearly 30 per cent moved to residential care.

In the comparison group nearly two-thirds of those in foster care at baseline were in foster care at follow-up. Similarly, nearly two-thirds of those in a local authority residential placement at baseline were still in residential care, although around one-third of this group had moved to an out-of-authority placement by follow-up. Thus those who did not receive MTFC were for the most part in the same type of placement at follow-up as they had been in at baseline. This was not always precisely the same foster or residential placement but for almost half (45 per cent of cases) it was.

Table 11.7 Did not receive MTFC: placement at baseline by placement at follow-up n (per cent of those in each placement type at baseline) n=103

	Placement at baseline			
Placement at follow-up	*Foster care*	*Local residential*	*Other residential*	*Parent/ relatives*
Foster care	23 (64)	3 (9)	3 (9)	
With parents or relatives	4 (11)	3 (9)	2 (6)	1 (50)
Residential care (local authority)	4 (11)	14 (44)	1 (3)	
Residential care (other)	2 (6)	6 (19)	25 (76)	
Other	3 (8)	6 (19)	2 (6)	1 (50)
Total	36 (100)	32 (100)	33 (100)	2 (100)

The use of residential care had reduced slightly for the comparison group, as over one-quarter (n=19) of the young people formerly in residential placements had moved elsewhere by follow-up. A few had returned home or moved to a foster placement, but nearly half of this group had simply aged out of care and had moved to some form of independent or semi-independent accommodation.

11.7 Summary

Most young people had been continuously looked after over the follow-up and whilst five per cent had returned home, this had been short lived and all but one had returned to care.

Around half of the total MTFC group were still in MTFC at follow-up. Of those who had left MTFC, one-third were living in foster care or with relatives, 15 per cent had moved to semi or independent living and almost half were in residential care. This pattern of T3 placement type was similar to that of the total comparison group. Importantly, return home from an MTFC placement was uncommon for young people in our sample.

There was some degree of placement movement over the follow-up. Whilst some movement was inevitable given the time-limited nature of the programme, there was nevertheless, evidence of placement instability for the sample. Over one-quarter of the CaPE sample had moved more than once with the number of moves ranging from none to 13 during the year.

An initial aim of the MTFC programme was to enable young people who had experienced multiple placement moves to achieve greater stability. For those in the CaPE sample who had moved on from their index placement, there was no difference in the number of subsequent placement moves for those who had been in MTFC and those who had not, even when accounting for the amount of time between index placement ending and the follow-up point. It is likely, however, that the short follow-up timeframe meant that it was too soon to tell whether MTFC was having an impact on subsequent placement stability, particularly as half the MTFC group were still in MTFC.

Analysis indicated that the type of follow-on placement was associated with the amount of time spent in the MTFC placement. Those young people who moved to other foster placements had typically been in MTFC longer than those who moved to other placements. This might be the result of having had more time to find an alternative foster place and plan the move. Equally, it might reflect local authority placement availability or might reflect a tendency for those more troubled young people who cannot settle in foster care to have their needs best met in alternative options, such as residential or secure care.

Almost half (45 per cent) of the young people who had left their MTFC placement had 'graduated' from the programme according the OSLC criteria[60].

Reasons for placement endings varied. A third of those for whom we had information, had a 'planned' placement ending. For the majority (66 per cent), their index placement has disrupted, either as a consequence of the young person's behaviour or difficulties, the carers inexperience or because the carer or the young person was unable or unwilling to continue the placement.

Finally, the study found that there was a reduction in the use of residential care at follow-up for the total MTFC group with half of those who had been in residential care at baseline living in a community setting at follow-up (including MTFC). However, when we looked just at those who had moved from MTFC over the follow-up, two-thirds of those who had come into MTFC from residential care had moved back to a residential placement. This pattern echoed that of the comparison group. As noted earlier, this might reflect local authority placement resources and decisions making as much as meeting the needs of young people, some of whom might benefit from residential options.Previous research has found that placement decisions may be strongly influenced by local placement policy and resources (Biehal, 2005)

[60] This compares to around 56 per cent of MTFC graduates nationally. The programme developers at OSLC require a graduation rate of 66 per cent before the programme can be certified as an MTFC provider. See National Implementation Team 2009.

Chapter 12 Participation in Education and Involvement in Risk Behaviour over the Follow-up

The chapter examines key outcomes for young people at follow-up. It focuses particularly on young people's engagement in education and their involvement in offending and other risk behaviour, comparing those who had received MTFC and those who had not. In doing so, we explore whether MTFC appeared to make a difference for certain groups of young people in certain key life areas. These areas have previously been identified as protective factors (engagement with education) and risk factors (offending and anti-social behaviour) which are indicative of progress and future outcomes for looked after children and care leavers (Dixon, Lee, Wade*, et al.*, 2006).

12.1 Education at one-year follow-up[61]

A key aspect of MTFC was to provide extra support for education. However, schooling remained an area of difficulty for this sample at follow-up, with only one-third in mainstream school at follow-up in both the observational and RCT samples. Table 12.1 shows education provision for the total CaPE sample at the follow-up date for those who had received MTFC and those who had not. Below that for comparison, Table 12.2 shows the education received at baseline by the same groups.

[61] Young people who were over the age of compulsory schooling and who were not currently in education were excluded. This was five cases for the received MTFC group (36 per cent of the over 16s for which we have data) and 15 cases (31 per cent of over 16s) for the comparison group.

Table 12.1 Education at one-year for total sample n (per cent) (n=187)[62]

Education type	*MTFC group* n=99	*Comparison group* n=88	*Total*
Mainstream	42 (42)	26 (30)	68 (36)
Special school (day)	23 (23)	15 (17)	38 (20)
Education on premises of residential unit	12 (12)	16 (18)	28 (15)
Pupil referral unit or home tuition	11 (11)	11 (13)	22 (12)
FE college	9 (9)	19 (22)	28 (15)
No education	2 (2)	1 (1)	3 (2)

Table 12.2 Education at baseline for total sample n (per cent) (n=201)

Education type	*MTFC group* n=97	*Comparison group* n=104	*Total*
Mainstream	53 (55)	38 (37)	91 (45)
Special school (day)	15 (16)	14 (14)	29 (14)
Education on premises of a residential unit	7 (7)	14 (14)	21 (10)
Pupil referral unit or home tuition	10 (10)	18 (17)	28 (14)
FE college	5 (5)	14 (14)	19 (10)
No education	7 (7)	6 (6)	13 (7)

The percentage in mainstream education reduced over the follow-up period for both groups. In both, there was a move from mainstream to special school (day). The increase in age also brought about a move to further education and this was particularly marked in the comparison group.

Amongst young people of school age, all of those who were out of education at baseline were back in education by follow-up and two-thirds of these were attending well. Three young people dropped out of education during the follow-up period.

Looking more closely at the data on moves from mainstream to other types of education it was clear that this happened almost exclusively for those who were of secondary school age at the follow-up date (see Table 12.3)[63]. This fits with the finding at baseline that the younger age group were more likely to be educated in mainstream school. The drop in the use of mainstream education can therefore partly

[62] There is data on school placement for 85 per cent of cases. Nine cases were lost to follow-up. Eight comparison cases and one MTFC case. The remainder of the missing data was due to the young people being over compulsory school age.

[63] A logistic regression showed age at baseline (p=0.02) but not whether received MTFC was a significant factor in predicting those who remained in mainstream at follow-up.

be explained by the one year increase in age over the follow-up period. However, it may also reflect work to find education provision that better suits the needs of some young people, such a special day schools.

Table 12.3 Education at follow-up for those in mainstream education at baseline by age at follow-up n (per cent) n=84

Education Type	*Up to 11*	*12-13*	*14-15*	*16+*	*Total*
Mainstream	13 (93)	19 (68)	19 (61)	2 (18)	53 (63)
Special school (day)	1 (8)	4 (14)	4 (13)	2 (18)	11 (13)
Education on premises of a residential unit	0 (0)	0 (0)	5 (16)	0 (0)	5 (6)
Pupil referral unit or home tuition	0 (0)	3 (11)	1 (3)	2 (18)	6 (7)
FE college	0 (0)	1 (4)	1 (3)	5 (46)	7 (8)
No education	0 (0)	1 (4)	1 (3)	0[a] (0)	2 (2)

[a] Anyone out of education in this age group was excluded from the analysis.

12.2 School attendance and exclusion at follow-up

12.2.1 Attendance

Attendance did not improve for either group during the follow-up period, with a third of the young people truanting at least occasionally and almost a fifth showing frequent non-attendance.

Table 12.4 School attendance: total sample n (per cent) n=182[64]

	Received MTFC group n=97	*Comparison group n=85*	*Total*
Mostly attends	67 (69)	55 (65)	122 (67)
Occasional non-attendance	16 (17)	11 (13)	27 (15)
Frequent non-attendance	14 (14)	19 (22)	33 (18)

Those who received MTFC did not do any better than those in other placements with regard to attendance. There was no significant effect for MTFC when taking account of age, time in placement and attendance at baseline[65].

[64] Attendance data was available at follow-up for 83 per cent of the sample. Thirteen cases had missing data (two MTFC cases and 11 comparison cases). The remainder of the missing cases were because attendance was not applicable as the young person was not in school.

For both the total MTFC and the total comparison groups, those who had remained in their placement for the year had better school attendance than those who had left their placement. There are various possible reasons for this. One is a selection effect, whereby those who are not attending school tended to have placement breakdowns. Another is that those who have left have had to move school and are unsettled. A third explanation is that those who are in stable placements are receiving more support to keep them in school. It is not possible to tease out these different explanations with the current data.

The raw figures for attendance for those receiving three or more months of MTFC shown in Table 12.5 further illustrate the finding that, despite having education workers on the teams, attendance did not improve for those who received MTFC[66].

Table 12.5 School attendance by those who were in MTFC for three months or more n (per cent)

	Attendance at baseline n=71	*Attendance at Follow-up* n=82
Mostly attends	57 (80)	58 (71)
Occasional non-attendance	8 (11)	13 (16)
Frequent non-attendance	6 (9)	11 (13)

12.2.2 Exclusions in the three months prior to follow-up date[67]

Temporary exclusions in the three months prior to follow-up were more common for those who had received MTFC than those who had not[68]. Again this appears to be due to differences in age between the groups[69]. Temporary exclusions were related to age with those in the 12-13 age group most likely to receive exclusion[70].

[65] A logistic regression showed that whether they were still in their index placement was the main predictor of truancy at T3 ($p<0.001$) along with truancy at baseline ($p=0.03$), age at baseline ($p=0.13$) adding little and no effect for whether received MTFC ($p=0.8$).
[66] A logistic regression showed that age ($p=0.04$) and truancy at baseline ($p=0.02$) but not whether received three months of MTFC predicted truancy at follow-up. This was for those who had been in their index place at least three months and who were of compulsory school age at follow-up.
[67] Because of incomplete data at baseline a comparison between baseline and follow-up data was not possible.
[68] Chi-square test significant at p=.01.
[69] A logistic regression showed age ($p=0.04$) as a significant predictor ($p=0.04$) of temporary exclusions but receipt of MTFC was not.
[70] Chi-square test significant at p=.01.

Table 12.6 Exclusions: total sample n (per cent)

	Received MTFC group	*Comparison group*	*Total*
Temporary exclusion (n=173)	32 (36)	15 (18)	47 (27)
Permanent exclusion (n=169)	4 (5)	6 (7)	10 (6)

12.3 Offending and involvement with the youth justice system

The high incidence of offendingwas a key area of concern at baseline . It therefore seemed appropriate to focus on this risk area at follow-up. Information about whether the young person had been involved with the youth justice system (YJS) in the six months prior to follow-up was gathered from carers and either the social worker or MTFC worker. Involvement with the YJS was used as a proxy measure of offending activity with the provisos that (a) for those young people who had been convicted of an offence over the follow-up, the conviction may well have been the result of offences committed prior to baseline that had taken several months to move through the judicial process and(b) some young people in the sample may have committed offences that had not come to the attention of the relevant agencies[71].

We compared involvement with offending during the six months prior to follow-up for those who had received MTFC and those who had not. We also looked at offending behaviour at baseline for the same groups. There was no statistical difference in the various types of involvement between those who had received MTFC and those who had been placed in other care placements over the follow-up. As Table 11.8[72] shows, around one in five (22 per cent) young people in both groups had been charged with an offence. The number of offences ranged from one, for most of these young people, to six offences.

Examples of offences included assaults on other young people and adults including foster carers, teachers and members of the public. One young person had been charged with four counts of actual bodily harm (ABH) over the follow-up. Criminal damage was also commonly reported along with theft of cars and theft from shops and carers as well as reprimands for alcohol and drug related behaviour. In some

[71] There were some discrepancies in reports of involvement in offending across the different data sources. This was in many cases a result of the variable timing of completion of the different questionnaires. Data completed nearest to the T3 date (that is, one year on from baseline) was used. The different data sources were collapsed into one variable for each type of involvement, to indicate whether there was any evidence of recorded offending.

[72] Chi-square tests were carried out to compare recorded offending of those who had and had not used MTFC. We found no statistical difference between the groups. ASBO (1) .918, p=.338 ns, charged (1) .003, p=.953 ns, convicted (1) 1.745, p=.186 ns, reprimand/final warning (1) 1.000, p = .317 ns, combined convictions and reprimand/warning (1) .549, p=.459 ns, combined ASBO, charged, convicted, reprimand and final warning (1) .088, p = .766 ns.

cases young people had been charged with multiple offences. The foster carer of one 16 year old explained:

> *He is on [a] behaviour contract with the police for criminal damage, attempted arson with putting fireworks through a letterbox, stealing from my husband's van, selling the camera and receiving stolen goods.*

Table 12.7 Involvement in offending over the follow-up for total CaPE sample n (per cent)

Type of involvement	*MTFC group*	*Comparison group*	*Sig.*	*Total* n=176-195
Charged with an offence (n=195)	21 (22)	22 (22)	ns	43 (22)
Received formal reprimand or warning (n=189)	21 (21)	14 (16)	ns	35 (19)
Convicted of an offence (n=194)	10 (10)	16 (17)	ns	26 (13)
Anti-social Behaviour Order (ASBO) (n=176)	1 (1)	0	ns	1 (1)

Combined measures	*MTFC group n=106*	*Comparison group n=108*	*sig*	*Total n=214*
Recorded offences (convictions, reprimand/warning) (n=214)	27 (26)	24 (22)	ns	51 (24)
All involvement in offending (n=214)	31 (29)	31 (29)	ns	62 (29)

Over one-quarter (29 per cent, n= 62) of the total CaPE sample appeared to have had some involvement in offending during the six months prior to follow-up. There was a strong association between involvement in offending at follow-up and earlier offending for the total CaPE sample. Almost half (n=35, 48 per cent) of those who had offended in the six months prior to baseline had continued to have some involvement in offending at follow-up ($p<0.001$)[73].

We found no evidence of a difference in involvement in offending-related behaviour between those who had received MTFC and those who had not (29 per cent in both groups, see Table 12.7). The lack of difference between the groups remained when we took into account of offending at baseline[74]. The basic conclusion that 'on average' receipt of MTFC did not affect recorded offending remained if we adjusted

[73] Chi square test was carried out on relationship between offending at baseline and at follow-up for the total CaPE follow-up sample: (1) 18.250, p<.001.
[74] Crosstabs were carried out to look at those who had used MTFC and those who had not in terms of offending at follow-up and offending at baseline Mantel-Haenszel p = .766 ns.

for whether or not young people were still in their index placement at follow-up (MTFC or the usual type of care) in addition to their previous offending[75].

Table 12.8 Offending at baseline and follow-up (per cent) n=214

		Received MTFC n=105	*Comparison* n=109
No offending at baseline	No offending at follow-up	54 (51)	57 (52)
	Offending at follow-up	17 (16)	10 (10)
Offending at baseline	No offending at follow-up	20 (19)	21 (19)
	Offending at follow-up	14 (14)	21 (19)

These findings, however, may have obscured a more complex situation. We found that we could make a better prediction of offending if we took account of the possibility that previous offenders placed in MTFC might become less likely to offend in future while those who had not committed any recorded offences might become more likely to do so. On average, receipt of MTFC was associated with an increase in recorded offending. This general effect, however, was balanced by the fact that it did better than expected with those who had previously offended. In other words there seemed to be evidence that MTFC was doing well with previous offenders but not with those who had not previously committed offences[76]. This evidence is not conclusive for reasons set out in the footnote. It does, however, imply that if MTFC does have a good effect on future offending, its influence appears to be restricted to those who have offended already.

[75] Crosstabs were carried out on those in MTFC and those not in MTFC in terms of involvement in offending over follow-up adjusting for baseline offending and remaining in index placement. Mantel-Haenszel p =.670.

[76] A model predicting offending from age and recent involvement with criminal justice system at T1 gave an overall omnibus chi square of 19.97, df=2, p<.001. Addition of 'received MTFC' adds little to this prediction with an omnibus chi square of 20.48 df=3, p<.001. In this model received MTFC has a slight positive association with future offending but one which is far from significant (p=.4). If we add the interaction between receipt of MTFC and previous offending there is a significant increase in the model (chi square=25.06 df=4, p<.001). This is a significantly better model than one with MTFC on its own but not than the one without either MTFC or the interaction term. In this model receipt of MTFC is significantly associated with offending (p=.025) while the interaction between MTFC and previous offending is negatively associated with future offending (p=.035). Previous offending remains associated with future offending (p=.002) as does age (p=.04). These analyses suggest that if MTFC has a positive effect on offending it only does so through its effect on those who are offending already. This assumption is slightly strengthened if one takes account of whether or not the young people were in their index placement at follow-up. Models which do this are significantly strengthened by the addition of receipt of MTFC and its interaction with offending.

Further analysis was conducted on the MTFC group only, to explore whether the length of time in the intervention made a difference to the likelihood of being involved with offending at follow-up (regardless of whether there was evidence of offending at baseline). Tests carried out on the number of days in the intervention indicated that young people who had remained in MTFC longer appeared less likely to have been involved in offending over the follow-up. Those whose placement had ended sooner, meanwhile, appeared more likely to be involved in offending (p=0.002)[77].

We also looked at whether remaining in MTFC for three months or more made a difference. Again, there was some indication that recorded offending was more evident amongst those who had left their MTFC placement within three months compared to those who had remained longer, as there was evidence of recorded offending by just over half (53 per cent) of the early leavers compared to one-quarter (24 per cent) of those who had stayed onthe MTFC programme for more than three months[78].

There are different explanations for these findings. It could be that the longer a young person remained in MTFC the more impact the intervention had on curbing involvement in offending. It could be that any positive effect was subsequently washed out for those young people who left earlier. In some cases, those who offended left earlier as a direct result of their offending. Qualitative evidence from the case studies showed that some MTFC carers had struggled to contain or cope with the young person's offending, whilst in other cases offending had resulted in the young person being remanded or sentenced to an alternative placement, such as secure care or a YOI, effectively ending the MTFC placement.

It was also apparent that some young people had continued to offend whilst in MTFC, indeed one in five (20 per cent) of those who were still in their MTFC placement at follow-up had been involved in offending in the previous six months. This suggests that MTFC had been unable to work with those more dedicated or serious offenders long enough or effectively enough to make a difference to their involvement in offending.

12.4 Other risk behaviour over the follow-up

HoNOSCAs were completed at baseline and follow-up for nearly all the young people in the study. The HoNOSCA includes sub-scales which measure anti-social

[77] Non-parametric tests on the mean number of days in MTFC placement in terms of recorded offences over the follow-up (evidence of offending m=203.3 compared to no evidence of offending m=287.31 Mann-Whitney U test p=0.002).
[78] Chi square test was carried out on the MTFC group to look at recorded offending at T3 for those who had been in MTFC for three months or more and those who had not (1) 6.119, p = .013.

behaviour, self-harm and drug and alcohol use, each on a scale of 0-4. A summary of mean scores on these subscales at each time point for the different groups is shown in the Table 12.9.

Table 12.9 Mean HoNOSCA scores at baaseline and follow-up (n=200 to 213)

	Baseline		Follow-up	
	Received MTFC	Comparison group	Received MTFC	Comparison group
Self-harm	0.62	0.65	0.81	0.81
Anti-social behaviour	3.01	2.50	2.38	2.30
Substance misuse	0.71	0.99	0.74	1.11

As can be seen in Table 12.9, anti-social behaviour was a particular difficulty for this group. Accounts from social workers and MTFC workers suggested that some young people displayed considerable levels of aggression and violence towards their carers, peers, and others and also towards property as described below,

> *His angry behaviour manifests in swearing, spitting and throwing objects.*

> *There have been threats to foster carer, verbal abuse, and other acts of aggression with the use of a knife.*

> *She kicked and punched a friend, even carried on when she was on the floor. Broke both hands.*

Some young people had multiple difficulties, such as Janet:

> *She was physically aggressive to the social worker, threw something at her and was in a rage. She will cry and shake, swear. She takes overdoses from time to time and can attention seek by cutting herself. She ran away and was very abusive to police to the extent she was nearly arrested.*

An analysis of change in scores between baseline and follow-up for each of the HoNOSCA subscales in Table 11.9 suggests that for those who received MTFC there was a significant decrease in anti-social behaviour[79] but no significant change on the other measures. For the comparison group there was a significant increase in substance misuse[80] but no significant change on the other measures. The change in anti-social behaviour for the MTFC group will be explored further in Chapter 14.

[79] Paired Wilcoxon signed rank test z=-4.8, p<0.001.
[80] Paired Wilcoxon signed rank test z=-2.57, p=0.01.

12.5 Summary

High levels of truancy, offending and anti-social behaviour remained a problem for this sample at follow-up.

On average MTFC was no better than the comparison placements in producing improvements in education or risk behaviour. However, this may mask a more complex reality in which some young people benefited and others did worse. This seems most likely to be the case for those involved in offending and those with anti-social behaviour. Both groups may benefit from MTFC but this apparent benefit may be balanced by the better performance of other groups in alternative placements. These hypotheses need more vigorous exploration which will be carried out in the next two chapters.

Chapter 13 Analysis of Primary Outcomes: Global Functioning at Follow-up

This chapter reports on the analysis of our primary outrcome measures, the C-GAS and the HoNOSCA, both of which are standardised measures of global functioning. Chapter 3 has described the nature of these measures (section 3.4) and the methods used for their rating and analysis (sections 3.8 and 3.9 respectively).

As outlined earlier, 185 young people were included in the observational sample, of whom 93 received MTFC and 92 TAU. A further 34 young people were recruited into the RCT sample, 20 of whom were randomised to MTFC and 14 to TAU. However, as described in Chapter 3, there were nine 'crossover' cases in the RCT sample. Eight young people randomised to receive an offer of MTFC never received it, in most cases because it was never offered to them by the local authority. Another young person randomised to TAU subsequently entered MTFC. Outcomes in these crossover cases were analysed on an Intention to Treat (ITT) basis in this primary outcome analysis.

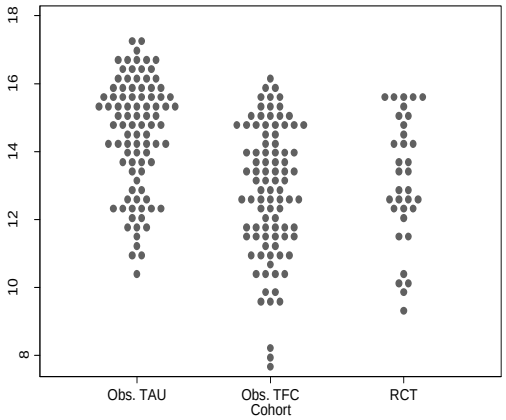
In this chapter we consider results for our two samples separately. In the chapters which follow we pool the two samples and compare outcomes for those who actually received MTFC with those for young people who did not.

13.1 Baseline differences in the observational sample

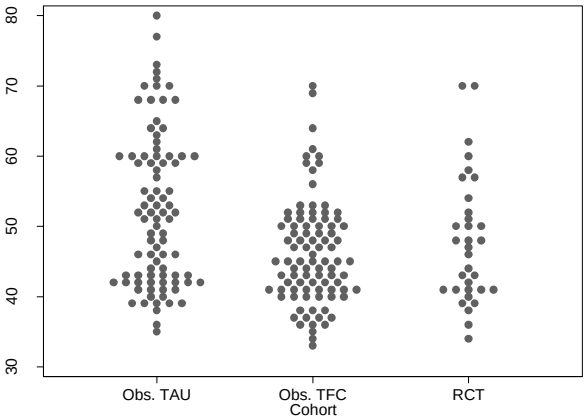
As we saw in Chapter 7, there was evidence of differences at baseline between the young people receiving MTFC and TAU in the observational sample. Such differences takes on great significance when we come to analysis of the results, since the purpose of the study overall is ideally to compare similar groups of young people receiving different interventions. These baseline group differences are summarised by the dot-plots in Figure 13.1 with each subject represented by a point. The whole RCT sample is added for reference. It can be seen that young people in the MTFC group within the observational sample and those in the RCT sample tended to be younger and to have lower CGAS scores than those receiving TAU in the observational comparison.

Figure 13.1 Quantitative characteristics at T1 comparing observational samples with randomised sample

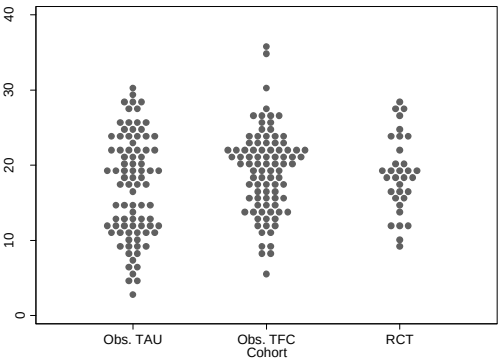
(i) Age at study entry



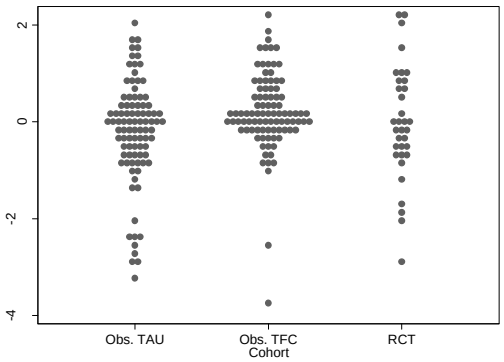
(ii) CGAS



(iii) HoNOSCA



(iv) Troubled[81]



The summary statistics presented in Table 13.1(below) show that the RCT sample were in many ways closer to the observational MTFC sample than the observational TAU sample. A one-way analysis of variance suggested a significant difference between the three groups for these characteristics. Multiple comparison tests confirmed that the MTFC sample in the observational cohort was significantly different from than the TAU group. The RCT sample was significantly younger than the TAU sample in the observational cohort

[81] 'Troubled' is a summary measure created in order to overcome difficulties with missing data. It was created using principal component analysis of measures taken from the carer, young person, social worker and reports and records related to general behaviour and well-being.

Table 13.1 Comparison of observational samples and randomised sample at entry into study

	Obs. TAU			*Obs. MTFC*			*RCT*			*ANOVA*
	mean	sd	n	mean	sd	n	mean	sd	n	p
Age	12.26	1.95	93	14	1.68	92	12.68	1.80	34	<0.0001
CGAS	52.28	10.86	87	46.29	7.45	92	47.91	9.12	33	<0.0001
HoNOSCA	17.07	6.79	87	19.27	5.55	91	18.72	5.01	33	0.048
Troubled	-0.19	1.07	92	0.20	0.82	93	-0.01	1.17	34	0.027

The RCT sample were also more likely to be in residential care at entry (p= 0.029) than the observational sample. In the observational sample, MTFC group were less likely to be in residential care than the TAU group (p=0.023).

13.2 The need for a propensity score analysis

As described in the chapter on Methods, we dealt with these baseline differences in the observational sample by using a 'Propensity Score' method. This method selects from the control (TAU) sample a sub-sample that has characteristics that are as close as possible to the those of cases in the MTFCE group – it thus creates a 'trimmed dataset' for analysis in which cases receiving MTFC are compared with cases receiving TAU that are as similar as possible on observed variables.

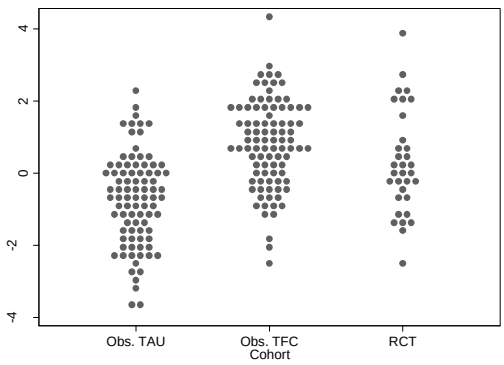
When this was done and cases with probabilities of receiving MTFC above 0.95 or below 0.05 were dropped from the dataset, a 'trimmed' dataset containing 25 fewer cases was generated. The data for the untrimmed and trimmed groups are displayed in Figure 13.2. Even having done this, there was still evidence that age (p<0.0001), C-GAS score at T1 (p=0.007) and to a lesser extent placement in residential care prior to the study (p=0.081) were imbalanced between the groups but, nevertheless, balance had been improved.

Table 13.2 T1 predictors of receipt of MTFC in observational comparison – logistic regression model coefficients

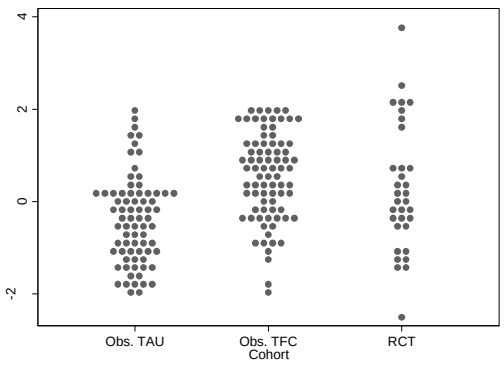
Receipt of MTFC	*Odds Ratio*	*95% Conf.*	*Interval*	*p-value*
(i) Untrimmed (n=178)				
Gender	0.844	(0.41	,1.75)	0.648
Age	0.584	(0.47	,0.72)	<0.0001
Residential	0.536	(0.26	,1.10)	0.087
CGAS (T1)	0.908	(0.85	,0.97)	0.003
HoNOSCA (T1)	0.960	(0.88	,1.05)	0.382
(ii) Trimmed sample (n=153)				
Gender	0.920	(0.44	,1.92)	0.825
Age	0.612	(0.48	,0.77)	<0.0001
Residential	1.949	(0.92	,4.12)	0.081
CGAS (T1)	0.909	(0.85	,0.97)	0.007
HoNOSCA (T1)	0.966	(0.88	,1.06)	0.459

Figure 13.2 Comparison of propensity score observational samples and the randomised study

(i) Untrimmed



(ii) Trimmed*



* The randomised sample was not trimmed.

13.3 Analysis of primary outcomes (C-GAS/HoNOSCA)

The summary scores for C-GAS and HoNOSCA at T1 and T3 for both cohorts are shown in Table 13.3. Firstly, this shows how the groups in the randomised sample are well balanced at T1 for both outcome variables (as expected with this method) whereas there are differences between the MTFC and the TAU group in the observational comparison, with the former having lower CGAS scores and higher HoNOSCA scores at T1 suggesting greater impairment at entry of those receiving MTFC. Secondly, it shows that cases in all arms of the study show an improvement on functioning, on average, over time during the study.

Table 13.3 Summary statistics for CGAS and HoNOSCA for randomised and trimmed observational samples

	TAU			*MTFC*		
CGAS	*mean*	*sd*	*n*	*mean*	*sd*	*n*
Randomised						
T1	48.31	9.05	13	47.65	9.39	20
T3	55.25	12.56	12	56.00	10.06	17
Observational (trimmed)						
T1	49.69	9.24	74	46.29	6.83	80
T3	53.78	10.82	69	53.54	9.70	80
HoNOSCA	mean	mean	sd	n	mean	sd
Randomised						
T1	18.47	4.45	13	18.89	5.44	20
T3	14.93	7.99	12	14.04	5.57	17
Observational (trimmed)						
T1	18.20	6.50	74	19.49	5.45	80
T3	16.88	6.74	68	16.98	6.46	80

Higher scores for C-GAS and lower scores for HoNOSCA represent less impairment.

Table 13.4 summarises the key differences between the groups at endpoint for the randomised study and the observational comparison. In the the randomised cohort, young people in the MTFC group had a marginally better outcome for CGAS at T3 than the TAU group (adj. mean diff 1.3 95 per cent c.i. -7.1 to 9.7)), but this was not statistically significant (p=0.75). A similar effect was observed in the observational comparison (adj. mean diff. 0.95 95 per cent c.i. -2.38 to 4.29 p=0.57). Similar intervention effects were observed for HoNOSCA at T3.

Table 13.4 Summary differences in outcome between MTFCE and TAU groups for both RCT and observational cohorts (linear regression estimates)

	*Adjusted mean Difference**	*95% Conf.*	*Interval*	*p*	*n*
CGAS					
Randomised	1.30	(-7.14	,9.74)	0.75	29
Observational (trimmed)	0.95+	(-2.38	,4.29)	0.57	149
HoNOSCA					
Randomised	-1.04	(-6.21	,4.13)	0.68	29
Observational (trimmed)	-1.09+	(-3.64	,1.46)	0.40	148

* Effect of MTFC compared to TAU adjusted for T1 score.
+ Weighted estimate.

In summary, this data shows that there is no evidence from these overall scores on functional outcome that MTFC gives significant overall benefit compared to TAU; either in the randomised or observational cohort.

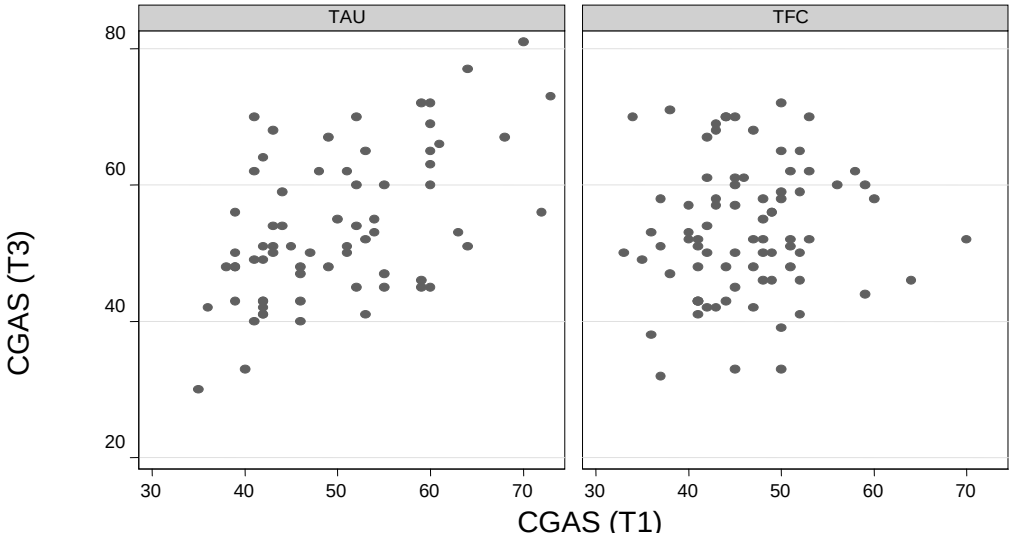
13.3.1 Secondary analysis

A secondary analysis considered whether the baseline values of the outcome measures made a difference to the treatment effect (Table 13.5). There was evidence that the relationship between C-GAS scores at T3 and C-GAS at T1 varied between intervention groups. Figure 13.3 plots C-GAS scores at T3 against the T1 score for the trimmed observational sample. There is evidence of correlation between T3 and T1 measures in the control sample (r= 0.53) but not the MTFC sample (r= 0.001). The lack of correlation in the MTFC sample is in part due to some outlying subjects with low impairment at entry but poor outcomes and some subject with high impairment and a good outcome.

Table 13.5 Interaction between treatment effect and baseline scores

	*Adjusted mean Difference**	*95% Conf.*	*Interval*	*p*	*n*
CGAS					
Randomised					29
	10.050	(-8.44	,28.54)	0.273	
Observational					149
	11.060	(3.92	,18.20)	0.003	
HoNOSCA					
Randomised					29
	-5.295	(-16.84	,6.24)	0.353	
Observational					148
	-3.359	(-8.41	,1.70)	0.191	

Figure 13.3 Plot of CGAS (T3) against CGAS (T1) in the observational sample after trimming



Graphs by treatment assignment

13.4 Conclusions

Taking the CaPE sample as a whole, across both the randomised trial and the observational comparison, there was no evidence that the MTFC intervention resulted in significantly better functional outcomes than treatment as usual as measured on our primary outcomes. Despite the strengths of the study methods, this

conclusion needs to be set against different kinds of limitations for each of the analyses. In the randomised study the sample size was underpowered to detect a plausible effect size. There was also a high proportion of ‘crossover’ cases (i.e. cases which were actually treated in one arm but analysed under the intention to treat analysis as in the other arm).

The observational comparison study benefited from a larger sample but there was evidence of significant differences between the MTFC and the control group in terms of age, impairment and living situation prior to entry into the study. For analysis, this sample was therefore trimmed using propensity scores. Such a procedure improves balance between the two treatment groups, but only in measured confounders. There is, at least in theory, still the possibility that some unobserved confounder is obscuring a difference between MTFC and treatment as usual.

A secondary analysis showed an interaction between baseline severity and treatment for CGAS scores: more severe cases appeared to respond better to MTFC. Surprisingly, there appeared to be little association between C-GAS score at T1 and T3. In contrast to the control group, a small number of young people receiving MTFC had either a poor outcome starting from low levels of impairment at T1 or had a good outcome starting from a high level of impairment. There are several possible explanations for this. It could just be a chance finding (that is, a false positive) more likely to occur as a post-hoc secondary analysis, or could arise from differences in selection or measurement between the two samples in the observational comparison. It could also point to a genuine differential effect of MTFC, which may be more effective with some groups of young people than with others. This will be explored in the next chapter.

Chapter 14 Why do these Outcomes Occur?

The last chapter found that, on average, there was little or no difference in the outcomes achieved by MTFC as against the usual alternative placements (TAU). This finding may, however, hide a more complex reality. Some of the more 'damaged' young people in MTFC seemed to do well, while some of the more adjusted young people in MTFC did less well than expected. This relationship between 'degree of impairment' and outcome in MTFC was not found in the TAU sample[82]. It suggests that MTFC may be most appropriate for those with the most severe problems.

In keeping with these findings the central concern of this chapter is to discover what kind of benefit the programme might provide for which young people (cf Pawson and Tilley, 1997). The chapter starts with hypotheses put forward by members of the research group when the analyis plan was developed and before the analyses of the last chapter were done, It then tests some other hypotheses put forward by the National ImplementationTeam or suggested by previous research.

In terms of method the chapter uses an 'observational approach' rather than one which relies on randomising the young people to MTFC or TAU. As explained earlier in the report we had foreseen the risk that the experimental side of the project would be 'underpowered', lacking sufficient numbers to ensure that we would find an effect if one was there to be found. In addition there is always a risk that an experiment will distort the intervention that it is intended to evaluate with the result that the effects are not replicated in the real world. It was for these reasons that we decided to supplement a sample in which young people were randomised to each arm of the study with a sample made up of young people who received MTFC with roughly comparable young people who received treatment as usual (TAU).

Obviously the non-experimental part of the study carries risks of its own. In a study including a heterogeneous group of subjects in a complex referral environment it is likely that an observational sample of this kind will not be balanced across the groups. This proved to be the case and analytic methods described below were used to adjust as far as possible for this in the analysis. .

[82] In the TAU group the correlation between the T1 and T3 CGAS is .65 in the full sample and .56 in the trimmed sample used in most of the analyses in this chapter. The corresponding correlations for the MTFC sample are .06 for the full sample and -.004.for the trimmed sample. This latter correlation was not simply the result of the odd association of a few outliers. The correlation between the T1 C-GAS and the T3 C-GAS was still slightly negative if we omitted those with scores in the top 10 per cent and bottom 12 per cent of the sample at T1 and T3 (r=-.047 for this truncated sample, as against r=-.004 for all those who had MTFC)..

14.1 Hypotheses and concerns

MTFC was originally designed to help young people with difficult behaviour. Many of its most prominent features – the 'token economy' embodied in its points and levels system and the emphasis on behaviour, reflect a behavioural approach. For this reason we thought that if MTFC did achieve change it would be most likely to affect behaviour and those with problems with it.

The likelihood that MTFC would lessen 'bad' behaviour seemed to us high. There is much evidence that behaviour can be influenced in care. For example, the large differences in behaviour of children in different residential establishments (Clarke and Martin, 1971; Sinclair, 1971; Sinclair, 1973; Millham, Bullock and Cherrett, 1975; Tizard, 1975; Sinclair and Gibbs, 1998; Hicks, Gibbs, Weatherly*, et al.*, 2007) and, if to a lesser extent, in different foster placements (Quinton, Rushton, Dance*, et al.*, 1998; Sinclair, Gibbs and Wilson, 2005; Sinclair, Baker, Lee *et al.*, 2007) are not explained by differences in the children they take. More direct evidence of the effects of MTFC on delinquency comes from the studies of the Oregon team itself (for example, Chamberlain and Reid, 1998; Eddy and Chamberlain, 2000; Eddy, Bridges Whaley and Chamberlain, 2004; Leve, Chamberlain and Reid, 2005; Chamberlain, Leve and DeGarmo, 2007).

Other findings from the Oregon team suggest that MTFC may provide most benefit to those with severe behaviour problems. The effects of MTFC on avoiding pregnancy seem particularly strong for those adolescent girls who had more involvement in crime before referral (Kerr, Leve and Chamberlain, 2009). The effects of KEEP (a modified form of MTFC) on problem behaviours seem particularly marked for those children exhibiting six or more of these behaviours a day (Chamberlain, Price, Leve*, et al.*, 2008). Similarly, the effects of KEEP on 'negative exits' only seem apparent among those children with a high number of previous placements (Price, Chamberlain, Landsverk*, et al.*, 2008).

Our basic hypotheses were therefore that:

- MTFC would reduce disruptive (anti-social) behaviour
- It would provide most benefit to those young people who were anti-social[83].

In contrast to behaviour, some aspects of temperament or personality seem less easily changed (for example, attachment behaviours) and so persist across placements and over time within the same placements. The persistence of such

[83] As described later we define 'anti-social' as a rating of 3 or 4 on the 'anti-social' sub-scale of the HoNOSCA. This meant that the young person showed at least 'Moderately severe aggressive or anti-social behaviour, such as fighting or persistently threatening or very oppositional or more serious destruction to property or moderate delinquent acts'.

problems despite excellent care is most clearly illustrated by Rutter and his colleagues' study of Romanian orphans, where the attachment difficulties of late adopted children proved very persistent (Rutter M. and the English and Romanian Adoptees (ERA) Study Team, 1998). Evidence of other continuities across and within placements is given in Sinclair and colleagues' study of foster children and more generally in any study that is able to use a variable measured in one setting to predict outcomes in another (Sinclair, Baker, Wilson *et al.*, 2005).

Evidence from the Oregon team suggests that MTFC may influence some of these 'hard to change' characteristics, notably attachment behaviour in pre-school children (Fisher and Kim, 2007). The question is whether these improvements take place through the effects of the model on behaviour (e.g. because a carer finds it easier to attach to a young child who is not behaving in a very difficult way) or through some other mechanism. Our second set of concerns therefore focus on the scope of the changes achieved through MTFC. In particular we put forward the hypothesis that:

- The changes achieved would be primarily behavioural but might lead to other desirable changes (e.g. improved behaviour at school might lead to better school grades)

In keeping with these concerns, the second part of this chapter also investigates whether other groups who are not defined by their behaviour (e.g. females or younger adolescents) also derive particular benefit from MTFC.

Our third set of concerns was with the timing and durability of any improvement achieved. These concerns were prompted by evidence from other studies that changes in behaviour that are brought about by one environment often do not last when a young person moves to a new one. This has been most fully documented for children leaving residential care and returning to the community (Allerhand, Weber and Haug, 1966; Sinclair, 1971; Taylor, 1973; Coates, 1978; Petrie, 1980; Lewis, 1982). There is similar evidence on the effects of return to the community on foster children where it has been documented for a wide range of social and behavioural problems (Sinclair, Baker, Wilson *et al.*, 2005; Berridge, Biehal, Lutman*, et al.*, 2011; Wade, Biehal, Farrelly *et al.*, 2011; Biehal, Ellison and Sinclair, 2011). So the price of being able to achieve change in care - or even, perhaps in intensive community treatment (Bank, Hicks Marlowe, Reid*, et al.*, 1991) - is often that the change is temporary and reversible.

The MTFC model itself seeks lasting changes in behaviour, partly by prescribing that its basic approach is followed in the placement to which the young person subsequently moves as well as in MTFC itself. In keeping with this aim the Oregon team reported that young people receiving MTFC committed fewer offences than their controls not only in the year in which the intervention is mainly delivered but also in the subsequent year or in the year after leaving treatment (Chamberlain,

2003). In sharp contrast to these findings, an English study by Biehal and her colleagues found that young offenders receiving MTFC were unlikely to be convicted while in foster care but much more likely to be so on leaving it (Biehal, Ellison and Sinclair, 2011).

Given the conflicting evidence reported above it is hard to make a precise prediction on the durability of any improvement. However, it is reasonable to hypothesise that:

- The intervention will have most effect on behaviour while the young people are in MTFC
- Its impact on leaving will be less, with the young people either continuing to improve but at a lesser rate (as found in the Oregon studies) or even losing some of the gains they have made (as found by Biehal and her colleagues).

14.2 Method

14.2.1 Sample

The analyses which follow are based on a sample of 171 young people, that had been trimmed in such a way that every young person in the sample had a propensity score[84] measuring the chance of being in the opposite arm of the study that matched that of at least one young person in the opposing arm of the study. The sample includes young people who were randomised as well as those who were not. Young people who had been randomised were grouped by the treatment they received rather than the one to which they had been randomly allocated[85].

The use of the propensity score in this way reduced the 'gross differences' between the two groups[86]. It did not ensure one to one matching, which would have grossly reduced the sample size and it still did not ensure that the groups were equally

[84]. We derived our propensity score using the same variables and methods as those described in Chapter 13 but used the pooled sample in our derivation. Our criterion reduced the number in the sample to 180. Further reductions reflect the availability of data. So tables based on the adjusted outcomes (see below) have 171 cases.

[85] The decision to 'pool' the two experimental and case control samples in this way was part of the original design. We carried out a number of analyses to determine whether the inclusion of the experimental sample significantly affected the direction or size of the associations we report and found no evidence that they did.

[86] The analyses we report do not use weighted data. The advantages of weighting are greatest when a) there is a causal model, b) the correlates of selection for treatment or comparison group are known and measured, and, c) there are variables which are important in the causal model and which it has not been possible to measure. 'Investigators who have a causal model that they believe in should probably just fit the equation to the data. If there are omitted variables but the propensity scores can be estimated with reasonable accuracy, weighting the regression should reduce bias. On the other hand, weighting is likely to increase random error by a substantial amount, the nominal standard errors are often severely biased downward, and substantial bias can still be present in the estimated causal effects.' Friedman, D. A. and R., B. (2008) 'Weighting Regressions by Propensity Scores ', *Evaluation Review*, *32* 4,392-409. We tested our main model with and without the use of weights and found that both yielded similar results.

matched in terms of their risks of a poor outcome. To allow for these risks we used an adjusted measure of outcome as described below.

14.2.2 Outcome score

This 'adjusted measure of outcome' allowed us to take into account known differences between those receiving MTFC as against TAU in those variables which affected outcome. For example, even after we had trimmed the sample the MTFC group scored 'worse' than the TAU group on the C-GAS at T1 (baseline) and would therefore be expected to do 'worse' on the C-GAS at T3 (follow-up). The adjusted outcome score takes this difference into account. In essence this score is simply a slightly more sophisticated form of a change measure such as one would get by subtracting the T1 C-GAS from the T3 C-GAS. It complements our trimming procedure as a further strategy for dealing with the differences between those getting MTFC and TAU.

To create this score we measured how well the young people were doing at follow-up using our primary outcome measure, the C-GAS (referred to below as the T3 C-GAS). Our adjusted measure of outcome is simply a measure of how far the young people were doing better or worse at follow-up than could be predicted from what we knew about them at t1[87]. Adjusted outcome scores that are negative suggest that the young person is doing relatively badly. By contrast a positive score should mean that he or she is doing relatively well. The word 'relatively' is important. On average young people do improve slightly as measured against their baseline scores. What we are measuring is not this 'absolute improvement', but rather the degree to which some do better than others after taking account of their starting point.

In creating this score we wanted to be sure that we had taken account of all the key variables which might have explained outcome. We considered the following: average HoNOSCA score at Time 1, our 'social factor' (a measure of behaviour in social situations, for example truancy or trouble with the police)[88], age, sex, number of placements in last 12 months, number of placements ever, age at last entry to care, sexual abuse, physical abuse, emotional abuse, neglect, and number of different kinds of abuse. None of these variables was significantly correlated with our adjusted outcome score[89]. Out of the wide set of variables in our data set, the combination of the C-GAS score at baseline and the variable 'troubled,' a summary

[87] In other word we use the normalised residuals of an OLS regression in which the T3 C-GAS is the dependent variable and the T1 C-GAS and the variable 'Troubled' are the independent ones. For ease of presentation we multiply the measure by 100.
[88] This was the second component that we derived in our analysis of the T1 data. Its main loadings were on difficult behaviour in social situations.
[89] Pearson correlations were .061 to -.083, tau B -.056 to .04. We also predicted the T3 C-GAS in a series of stepwise regressions in which we included 'Troubled' and the T1 C-GAS and each of the other variables in turn. The variables listed above were all rejected.

measure of general behaviour and well-being[90] gave us as good a prediction of the C-GAS score at follow-up as we could get. In other words, global functioning at follow-up was predicted by young people's global functioning and general behaviour and well-being at baseline.

The advantage of this adjusted outcome score is that it allows for prior risk but makes it possible to present the analysis without the use of the covariates and thus in a simpler way. A disadvantage is that its 'clinical meaning' is not immediately apparent. So it is better adapted to showing whether there is an effect than it is to suggesting what that effect might mean. We will deal with this by concentrating on statistical significance in the body of the text, but discussing the size – and thus clinical significance - of the differences in the conclusion.

14.3 Does MTFC affect those with behaviour problems?

14.3.1 Effects on anti-social behaviour

As noted earlier, our first hypothesis was that MTFC would provide most benefit to those young people who were 'anti-social'.We defined as 'anti-social' those young people whose oppositional, disruptive, threatening, aggressive or delinquent behaviour was given a ratings of 3 or 4 on the HoNOSCA 'anti-social' subscale. If MTFC genuinely benefits the 'anti-social' group, we would expect that its main effect would be on anti-social behaviour. As can be seen below, Table 14.1 supports this hypothesis. The 112 young people rated as anti-social at baseline were significantly less likely to be rated anti-social at follow-up if they received MTFC[91]. Only 43 per cent of them were rated as anti-social at follow-up as against 67 per cent of the anti-social young people in alternative placements..

[90] Troubled' is a summary measure created in order to overcome difficulties with missing data. It was created using principal component analysis of measures taken from the carer, young person, social worker and reports and records related to general behaviour and well-being. It is very highly associated with the summary SDQ score (loading .83), the total problem score from the CBCL (loading .84) and highly associated with scores of total difficulties (loading .5) and a well-being score derived from social work ratings (-.48). Its correlation with the T1 C-GAS is -.52. This is similar to the correlations found between measures of poor well-being when rated in different situations (e.g. at home or in the classroom). Both variables may therefore be tapping the same underlying dimension so that together they provide better predictions of the T3 C-GAS, which seeks to measure the same thing, than either does on its own.

[91] Fisher's exact test, p=.020.

Table14.1 Rated anti-social at T3 by received MTFC (n=112)

	Not anti-social at T3 (n=53)	*Anti-social at T3 (n=59)*
Did not receive MTFC	15 (33%)	30 (67%)
Did receive MTFC	38 (57%)	29 (43%)
Total	53 (48%)	59 (53%)

Note: This table only applies to the 'anti-social' that is, those receiving a rating of 3 or 4 on the disruptiveness scale at baseline.

There was a reverse trend for the young people who were *not* rated as anti-social, who tended to do better if they were in alternative placements[92]. This difference in trend was sharp and highly significant. As explained in the footnote below, this difference may be explained by a tendency to underestimate the difficulties of those in the MTFC group [93]. This finding means that we should be careful in attributing the apparently 'worse' performance of the non-anti-social in MTFC, compared to the non-anti-social in alternative placements, to the effects of MTFC itself

14.3.2 Do the anti-social benefit most from MTFC?

The above analyses suggest that MTFC does change anti-social behaviour. Its benefits in this respect seem to be restricted to those displaying this behaviour in the first place. Figure 14.1 examines whether this group also have the best outcomes when these are assessed against our adjusted outcome measure.

[92] Only 26 per cent of those in the TAU group rated as social at T1 were rated as anti-social at T3 as against 47 per cent of those in the MTFC group who had been rated as social at T1. In other words they tended to do better, although not significantly so, if they were in alternative placements (TAU). Chi square=5.904, df=1, p=.02 for the anti-social group, as against Chi Square p=2.057, df=1, p=.152 for the non-anti-social group. MTFC 'did better' with the 'anti-social' and TAU with the others. Tarone's test for the homogeneity of the odds ratio gives a Chi Square of 6.697, df=1, p=.01.

[93] This could occur in two ways. A rating of anti-social requires information on behaviour. If this information is missing a young person will be rated as social. This rating is more likely to be 'wrong' in a group where the chance of being anti-social is higher (something which is the case in the MTFC group). In addition the MTFC group were much more likely to be without a carer questionnaire and the CBCL it contained. Seven of the eight young people classified as anti-social at T3 but not at T1 did not have a full carer questionnaire at T1. By contrast, only four of the 13 young people classified as 'social' at both points were without full carer questionnaires at T1, a significant difference. This kind of 'misclassification' hypothesis was not able to explain the better performance of the anti-social young people receiving MTFC. Those who were rated anti-social did better if they received MTFC and this was true irrespective of whether they had a full carer questionnaire. The difference was significant among those with these questionnaires (p=.012, Fisher's exact), in the same direction but not significant among those without these questionnaires and significant if the results of both tests were pooled (p=.013, Mantel-Haentszel). For reasons of this kind we are more confident throughout this chapter in asserting the good effects of MTFC on the anti-social than we are about endorsing any possible negative effects on the social.

As Figure 14.1 shows, the group that improved most on our adjusted outcome score were those who received MTFC and were rated as anti-social at baseline. On average they have a positive score of just under plus 20. By contrast those who are anti-social and do not receive MTFC have negative outcome scores of around minus 20 on average, a significant difference in favour of MTFC (p=.02).

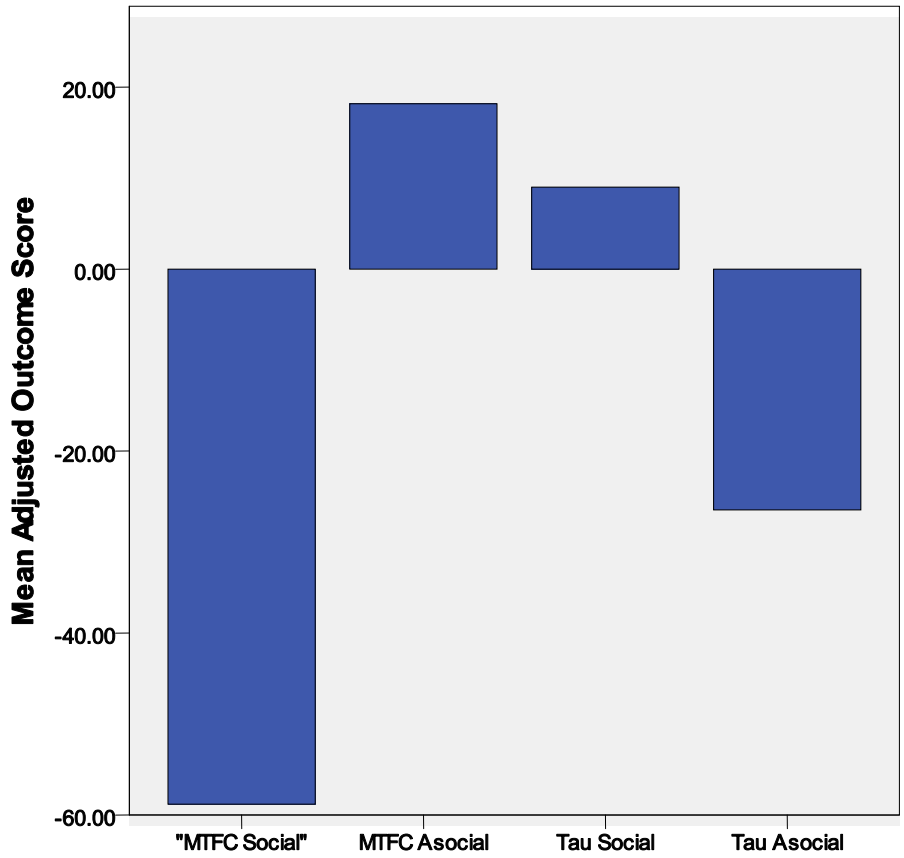
There is another sharp but very different contrast among those who are not anti-social (for convenience we call them the 'social'). They do comparatively better if they do not receive MTFC with an adjusted outcome score of around plus 10. If, however, they receive MTFC they do comparatively worse than the 'social' in alternative placements, with a score of nearly minus 60 (p=.006), (see Figure 14.1). In these ways the relationship between being anti-social and outcome differs sharply between the MTFC and TAU groups (p<.001)[94].

In keeping with these findings the average C-GAS scores of the 'social' group flatline if they receive MTFC (moving only from 49.90 to 50.68) but improve by nearly eight points (45.09 to 52.84) if they are in TAU. In contrast, the anti-social improves by an average of 5 points if they receive TAU but by more than 9 points if they receive MTFC. We looked for evidence that these differences could be explained by differences in the information available when the ratings were made. However, we were unable to find any[95].

[94] We carried out a two way analysis of variance with anti-social and received MTFC as the two main effects. This gave an F of .95, p=.39, df=2 for the main effects, and an F of 12.66, df=1, p<.001 for the interaction, The overall model was significant at .004 (F=4.63, df=3).

[95] For example there was no evidence that the adjusted outcome scores related in any way to the presence or absence of a carer questionnaire at T1. Similarly, as will be seen, the pattern of differences outlined above was repeated if we used proxies for anti-social behaviour that depended on reports and records rather than ratings.

Figure 14.1 Adjusted outcome scores by MTFC and anti-social group



14.3.3 Are the benefits of MTFC restricted to anti-social behaviour?

The good effects of MTFC seem to be delivered through its effect on anti-social behaviour[96]. In other words, if the young people's behaviour does not improve more than might be expected, other aspects of their well-being do not seem to improve either. It does not, however, follow that the benefits are restricted to this behaviour. It could, for example, be the case that better behaviour on the part of the young person allows the carer to be more sympathetic which in turn reduces emotional

[96] We carried out a number of different analyses to test this idea, looking separately at the anti-social on their own and the group as a whole. In the first case the test was that after taking account of disruptiveness at T3 MTFC was no longer significantly associated with a good outcome. In the second case we looked at the interaction between being anti-social, receiving MTFC and outcome which was no longer significant after taking account of disruptiveness at T3. We carried out both analyses with and without the initial rating of 'disruptiveness' as a covariate. All the analyses showed that by taking account of disruptiveness at T3 we drastically reduced the direct relationship between receipt of MTFC and final outcome.

disturbance. We explored this possibility and some found some evidence for it[97]. On balance it seems likely that the change in disruptive behaviour brought about by MTFC does bring with it other good effects but that these are less marked than the change in behaviour itself.

14.3.4 Are the differences in outcome between MTFC and TAU explained by differences in discharge rates?

MTFC placements are planned to last for nine to 12 months, so many (53 per cent) of the MTFC group had left their placements by follow-up. By contrast only 27 per cent of those who had received alternative placements (TAU) had left their index placement (see Table 14.2).

Table 14.2 Received MTFC by index placement at follow-up

			Still in index placement		
			No	Yes	Total
Received MTFC	No	Count	24	64	88
		% within received MTFC	27.3%	72.7%	100.0%
	Yes	Count	47	42	89
		% within received MTFC	52.8%	47.2%	100.0%
Total		Count	71	106	177
		% within received MTFC	40.1%	59.9%	100.0%

Chi Square = 12.01, df=1, p<.001.

A key finding was that on average, those who left did worse than those who were still in placement. This is true for the sample as a whole (mean adjusted ouctomes 11 v -33), for those in MTFC (mean adjusted outcomes 34 v -31) and those in alternative placements (mean adjusted outcomees -4 to -37). One consequence of these differences is that the higher discharge rate for the MTFC group means that mean scores for adjusted outcomes were worse for this group. If we compare only those who were still in placement at follow-up, we see that those in MTFC did significantly better (p<.044) on our outcome measure than those in alternative placements. Any analysis of outcomes therefore needs to take these differences in discharge rates into account.

[97] To explore this question we needed a measure of outcome that did not include anti-social behaviour. For this we used the mean HoNOSCA ratings at T3 after excluding the rating for disruptiveness. We carried out an analysis of variance using as a dependent variable the mean HoNOSCA ratings at T3 excluding disruptiveness, being anti-social and receipt of MTFC as main effects and as a covariate the mean HoNOSCA ratings at T1 excluding disruptiveness . The overall model was just short of significance (p=.059). The covariate was significant (p=.028), neither of the main effects 'being anti-social' (p=.66) and receipt of MTFC (p=.52) was significant but the interaction between being anti-social and receipt of MTFC was almost significant (p=.06).

In one way the picture does not change if we take account of discharges. Anti-social young people continued to do better if they received MTFC – outstandingly so if they were still in placement, much less so if they had left it. Similarly those who are not rated anti-social continued to do better if they were in alternative placements, considerably so if they were still in those placements. So although, as we saw in Chapter 13, there was no *overall* difference in the outcomes of MTFC and TAU,[98] young people who were 'anti-social' did better in MTFC and those who were 'social'did better in alternative placements.

Table 14.3 Still in index placement at follow-up: adjusted outcome by anti-social and receipt of MTFC

Rated anti-social at T1	*Received MTFC*	*Mean*	*N*	*Std. deviation*
No	No	11.91	33	98.81
	Yes	-59.45	11	59.20
	Total	-5.93	44	95.17
Yes	No	-22.34	30	84.39
	Yes	67.17	31	85.94
	Total	23.15	61	95.76

Note: This table is restricted to those still in their index placement.

Table 14.4 Left index placement by follow-up: adjusted outcome by anti-social and receipt of MTFC

Rated anti-social at T1	*Received MTFC*	*Mean*	*N*	*Standard deviation*
No	No	-47.06	4	82.17
	Yes	-58.12	10	68.77
	Total	-54.96	14	69.70
Yes	No	-34.76	15	87.83
	Yes	-24.01	36	105.16
	Total	-27.17	51	99.62

Note: This table is restricted to those who are no longer in their index placement.

We return later to the explanation and implications of these differences. Our next step is to see how far these patterns are reflected with certain other variables that we needed to consider.

[98] An analysis that looks at the combined effects of being anti-social, being in placement and receiving MTFC gives the effect of being in placement as significant at p=.04 and the interaction between being anti-social and receiving MTFC as significant at p<.001. The overall model was also significant at p<.001. In this analysis we omitted the third order interaction because of the small numbers of anti-social young people who left TAU.

14.4 Do other groups do better in MTFC or alternative placements?

Previous research by the programme developers in the USA, and the experience of the English National Implementation Team, suggested that a number of other groups might benefit particularly from MTFC or, alternatively, be more difficult to engage with it. We look at these groups below.

14.4.1 Sex

One study has suggested that MTFC may have particular difficulties with young women (Chamberlain and Reid, 1994). More recent studies have found that MTFC may nevertheless have benefits for young women including the reduction of delinquency, the prevention of pregnancy and improvements in homework and school attendance (Leve, Chamberlain and Reid, 2005; Chamberlain, Leve and Smith, 2006; Chamberlain, Leve and DeGarmo, 2007; Leve and Chamberlain, 2007).

Table 14.5 sets out the data on scores on our adjusted measure of outcome for females and males in this study.

Table 14.5 Mean adjusted outcome by MTFC, sex and if in index placement at follow-up

Received MTFC	*Female*		*Male*	
	In index	Left index	In index	Left index
Yes	-3.75 (15)	-31.75 (24)	54.99 (27)	-31.08 (22)
No	19.09 (29)	-86.25 (9)	-24.42 (34)	6.66 (10)
Total	11.30 (44)	-46.61 (33)	10.72 (61)	-19.29 (32)

Table 14.5 is complicated but presents an interesting pattern. Males did better than females while they were both in MTFC. This difference is not apparent among those who left MTFC where males and females did much the same. Males in MTFC did better than males who left it. This was not the case in alternative placements, where the handful of males who had left were actually doing better than those still in their index placement[99].

This apparent response of males to MTFC while they are in it goes with other evidence that anti-social behaviour in males may be more malleable. In the sample

[99] As usual we tested this pattern by using an analysis of variance with adjusted outcome as the dependent variable. The main effects (sex, receipt of MTFC and left index placement) were significant overall (p=.007) but the only significant individual main effect was 'left index placement' (p=.003). The only other significant effect was the third order interaction (p=.002). The overall model was significant (p=.001).

as a whole the adjusted outcome scores of 'anti-social' males were positive and those for males who were not 'anti-social' were negative. The opposite was the case for females[100] [101].

14.4.2 Age

Practitioners in the present study suggested that some older young people found the behaviour management programme harder to accept. We used an analysis of variance to test the hypothesis that those aged 15[102] or over might do worse on the programme than those who were younger. There was no evidence that they did.

14.4.3 Prior experience of residential care

The national implementation team suggested to us that the proper comparison would be with residential care, not other foster care. There are two reasons for this suggestion. First, foster care may have a particular benefit *per se* and by including young people in foster care in the comparison group we may have reduced the apparent effect of MTFC itself. Second, young people are generally in residential care because foster care was unable to contain them. If MTFC takes young people who were in residential care at baseline, it is clearly taking a difficult group and it is pertinent to ask how it does with them.

Table 14.6 examines the progress of those who had been in residential care at baseline and whether they fared better in MTFC. The pattern it shows is similar to others described above. Those who were still in MTFC were doing better than those in alternative placements who were still in their index placement. The difference between those who had been in MTFC but were now no longer there seemed particularly pronounced (a mean score of 49 for those still intheir MTFC placement but only –6 for those who had left it). The progress of the TAU group was not strongly related to whether or not they were still in their index placement. If anything they were doing slightly better if they were not.

[100] In an analysis of variance using sex and 'rated anti-social' as the two independent variables and adjusted outcome as the dependent one, none of the main effects was significant but the interaction was significant (p=.005) as was the overall model (p=.024).
[101] A speculative interpretation of these data would be that male behaviour is more likely to be 'reward driven', the result of an assessment of the immediate rewards or otherwise of behaving in certain ways. As a result they may modify their behaviour in MTFC in response to its demands. On leaving it, however, they may be more responsive to the demands of their peers. By contrast, some female behaviour may have deeper roots and be less responsive to immediate reward and punishment.
[102] A priori we took the top 25 per cent in age as constituting a group who would be hypothesised to have greater difficulty in accepting MTFC. Conveniently those up to 14 turned out to constitute 74.4 per cent of the sample so we took those 15 or over as the group hypothesised to be less likely to respond.

Table 14.6 Mean outcome by receipt of MTFC and if in index placement at follow-up

Still in index placement	*Received MTFC*	*Mean*	*N*	*Std. deviation*
No	No	-17.30	14	78.64631
	Yes	-6.36	23	106.00394
	Total	-10.50	37	95.54809
Yes	No	-21.60	38	88.20651
	Yes	49.43	15	96.69340
	Total	-1.50	53	95.37739
Total	No	-20.44	52	84.99965
	Yes	15.67	38	104.79923
	Total	-5.20	90	95.01397

Note: This table only applies to those who were in residential care before placement.

These results certainly suggest that MTFC is a viable alternative to residential care. They are not, however, statistically significant and for this reason there should be caution before assuming that MTFC is 'better' than residential care.

14.5 Do improvements made in MTFC last?

There would seem to be two possible explanations for the fact that 'anti-social' young people who have left MTFC have worse outcomes than those 'anti-social' young people still in placement.

1. Behaviour could tend to get worse when an anti-social young person moves from the closely supervised environment of MTFC to what is likely to be a less controlled setting.

2. Anti-social young people whose behaviour does not improve leave MTFC, while those whose behaviour does improve stay[103].

[103] An examination of those who leave their index placement suggests that criminal behaviour probably played a considerable role in whether or not they were there at follow-up. Recent involvement in criminal behaviour before T1 certainly marks out those who leave A logistic regression shows that recent involvement with the criminal justice system at T1 is a highly significant predictor of leaving (p=.004). If receipt of MTFC is added to this equation it too is significant at p<.001. Being anti-social also predicts leaving on its own (p=.017) but the association is no longer significant if recent involvement with the criminal justice system and receipt of MTFC are added to the equation. The association between recent involvement with the criminal justice system and leaving is more marked in TAU than in MTFC and so cannot explain why those who had left MTFC did worse relative to those in MTFC than was the case in the comparable comparison between those in alternative placements and those who had left them.

A direct test of these contrasting hypotheses would only be possible if we had ratings of outcomes at the end of the time in placement and again later. We do not have these data. We did, however, examine the issue indirectly. To do this we looked first at whether those who spent long enough in MTFC to benefit from it did better than those who only spent a brief time in placement. We then looked at whether the groups that seemed to do better in MTFC also seemed to do better if they had left.

14.5.1 Time in MTFC placement

We looked at two hypotheses[104].

- Young people who leave MTFC early (that is, within three months of entering) should improve less than others on the grounds that (a) they may not have been suited to it or motivated to profit from it and (b) they were not in it long enough to benefit from it (Smith, 2004)[105].
- The group of young people who leave MTFC after three months but before a year should do better than those who left early because it will contain increasing numbers who had planned exits from MTFC, who will have stayed long enough to benefit from the intervention.

As can be seen from Table 14.7 below, those who apparently benefited the most were those who were still in their MTFC placement at one-year follow-up. The differences in Table 14.7 are significant (Kruskal-Wallis Test, Chi square= 15.34, df=6, p=.018). Figure 14.2 presents the same data graphically.

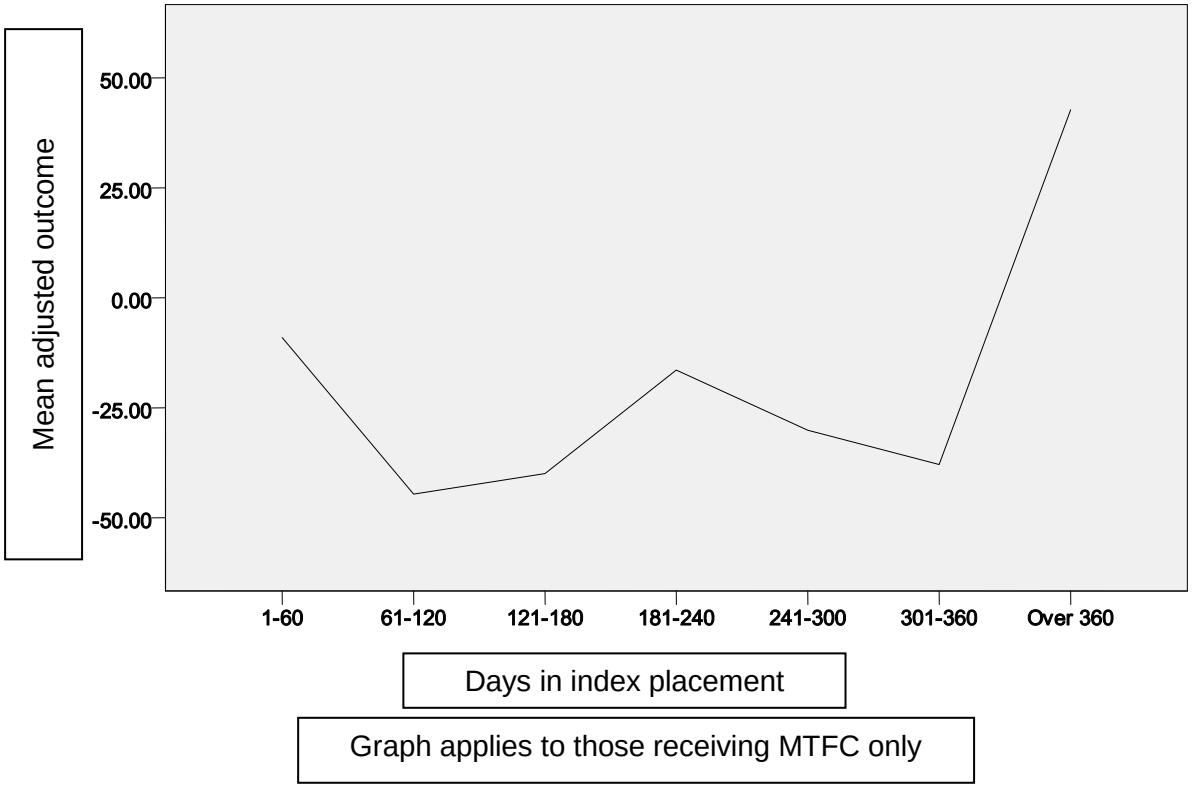
Table 14.7 Adjusted outcome by time in placement among MTFC group

Days in index placement	*Mean*	*N*	*Std. deviation*
1-60	-20.56	11	109.67
61-120	-49.89	12	107.12
121-180	-64.35	6	91.30
181-240	-16.41	10	81.98
241-300	-31.65	8	114.77
301-360	-40.63	8	73.53
Over 360	40.69	48	87.34
Total	0.00	103	99.01

[104] In exploring these ideas we looked at the MTFC group and included all those who received it. Our adjusted outcomes were calculated using the same methods as for the sample as a whole but in this case specifically on those who received MTFC.
[105] This hypothesis was suggested to us by the National Team who wanted it tested. They may have taken it from the original Oregon research (Smith 2004).

Among those who were discharged there was no clear trend for those discharged earlier to do particularly badly. Thus those who were discharged within 60 days did on average rather better than those who were discharged after 240 days.

Figure 14.2 Mean adjusted outcome by time in placement



A rather different way of looking at these data is to take the hypothesis put forward by the national team. This was that those who stayed for three months (that is, for more than 91 days) would be more likely to respond to MTFC than those who stayed for a shorter period. Table 14.8 explores this hypothesis.

Table 14.8 Adjusted outcome by length of stay in MTFC

Length of stay	*Mean*	*N*	*Std. deviation*
0-90 days	-41.2221	19	112.25485
91-365 days	-28.6809	34	87.96414
There at follow-up	35.1674	50	89.86881
Total	.0000	103	99.01475

In practice, as can be seen from Table 13.9, those who left within 91 days did do marginally worse than those who left after 91 days. The difference, however, was

small and a long way from being statistically significant. The large difference was again between those who had left and those who did not.

These figures suggest that the poor performance of those who have left an MTFC placement relative to those in one is not fully explained by the presence of non-responders. This provides support for the alternative hypothesis which is that the behaviour of those who leave an MTFC placement tends to deteriorate relative to the level achieved in placement.

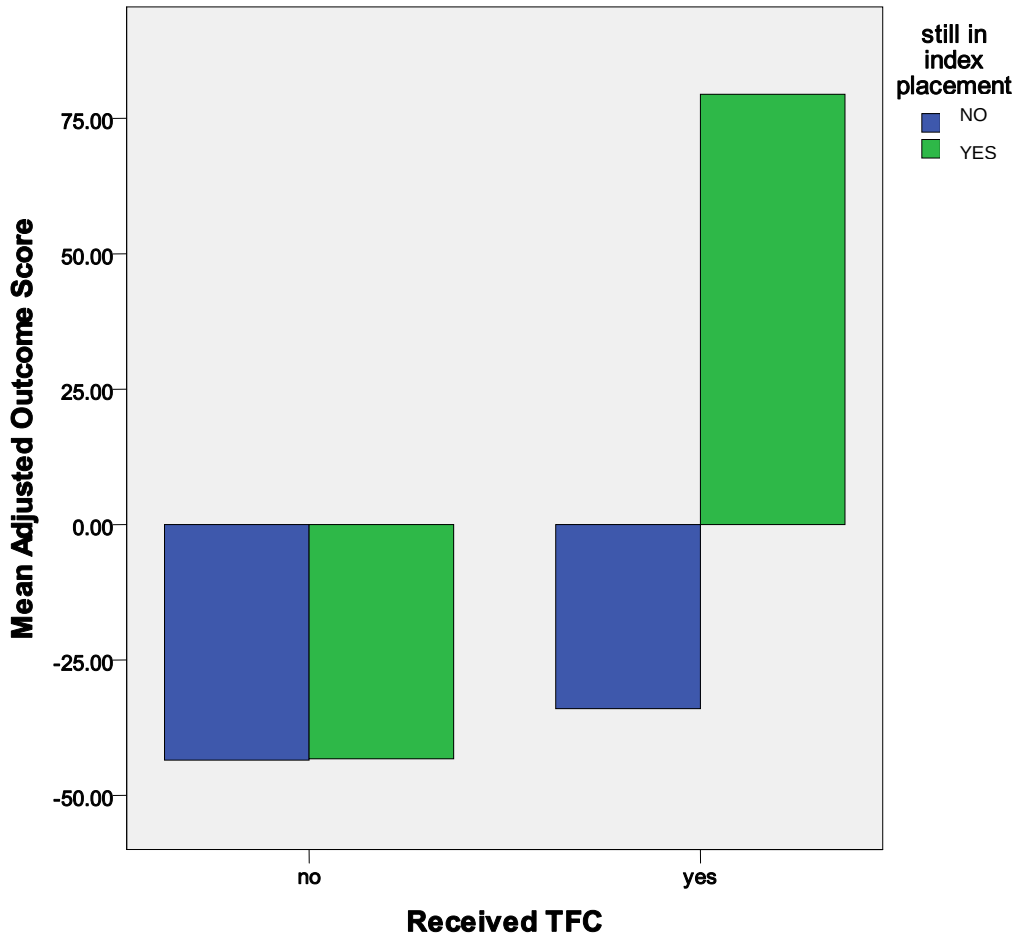
14.5.2 How do the groups who do best in MTFC fare on leaving?

The last section suggests that some at least of the gains made in MTFC reflect 'containment' rather than fundamental change. So the question is: 'Do those who benefit from MTFC while they are in it lose all the gains they made on leaving?' To test this hypothesis we used our earlier definition of anti-social. We also looked at those who were known to have committed an offence in the six months prior to placement. This latter group obviously overlapped heavily with those we defined as anti-social but could be defined purely on the basis of reports and records, thus bypassing the questions that might be raised about a rating.

Both analyses showed very similar results. Anti-social young people did better if they received MTFC (p=.008), and better if they were in placement than if they were not (p=.006). The comparative advantage of receiving MTFC was greater if they were still in placement. The signficance levels in the case of the recent offenders were very similar. The comparative advantage of being in placement for the recent offenders in the MTFC group was significantly greater (p=.018)[106] as was the overall advantage of receipt of MTFC (p=.006) and of being in the index placement (p=.018). Figure 14.3 illustrates these figures in relation to the recent offenders.

[106] The figures given come from Anova analyses.

Figure 14.3 Outcomes for recent offenders by MTFC and placement status



14.6 Summary

Chapter 13 found no overall difference in the outcomes of MTFC and TAU. There was, however, a suggestion of an interaction of treatment effect and baseline severity - the more functionally impaired children doing better in MTFC and the less impaired ones doing better in TAU. This chapter has explored these findings.

In keeping with the findings of the Oregon team we found that, after adjusting for initial risk:

- Young people who had been disruptive at baseline were significantly less so at follow-up if they had received MTFC
- They also did better on our primary outcome measure, the C-GAS
- These findings held if we took account of whether or not they were still in placement.

Less encouragingly from the point of view of MTFC we found that:

- Those who were not anti-social did better in alternative placements (TAU) than in MTFC.

Further exploratory analysis found:

- No evidence that the benefits of MTFC varied with age or previous experience of residential care

We also found that:

- Those who had left MTFC were doing significantly worse at follow-up than those who were still in it
- Their performance was not related to length of time in placement (in other words those who left early, presumably through failure to respond, did not seem to do worse than those who left later)
- There was greater improvement among males in MTFC than females balanced by worse outcomes among males as against females if they were no longer in placement[107]
- The comparative advantage of some of the groups who seemed to do best while in MTFC placements (the anti-social, those with recent convictions and males) was significantly less among those who had left

14.7 Conclusion

We predicted that MTFC would particularly benefit anti-social young people. The results seem to bear out this prediction. Essentially, this seems the same conclusion as that reached by the Cochrane review of Treatment Foster Care (Macdonald and Turner, 2009)[108].

It may be asked whether some young people would have done better if they had not been in MTFC. It is certainly true that those who were not 'anti-social' did significantly better on our outcome measure if they were in alternative placements. For reasons outlined in the chapter it is possible that some of the apparently worse outcomes of 'social' young people in MTFC have to do with the way we measured outcome. However this may be, it would seem that there is nothing to be gained by placing this group in MTFC and possibly something to be gained by placing them elsewhere.

[107] Overall males tended to do relatively better in MTFC but not significantly so (p=.082)

[108] 'Results indicate some clinically meaningful decreases in: anti-social behaviour, the number of days children and young people running away from placement; the number of criminal referrals and the time spent in locked settings. There is some evidence that young people in Treatment Foster Care spent more time in treatment over the long-term and more time at home. Examination of educational and employment outcomes showed improvements in school attendance, homework completion and finding work' (Plain English Abstract, MacDonald and Turner, 2008).

A second question is whether the gains made in MTFC are washed out on leaving it. Those young people who had left their MTFC index placement were doing worse than those who were in it, and this was so irrespective of how long they had spent in MTFC . Similarly anti-social young people and recent offenders did better than those in TAU if both were in their index placement but not after thay had left.

Those designing MTFC were concerned about this problem of 'washout' and the Oregon studies suggest that it can be at least lessened and possibly overcome. There is, however, evidence from this study and the earlier one on Intensive Fostering by Biehal and her colleagues (2010 and 2011) that in Britain it is a serious problem. We cannot explain this difference between the British and American evidence. It is possible that in Britain less attention has been paid to those parts of the model that emphasise the need to ensure that principles of MTFC are followed in subsequent placements and this is, perhaps, an hypothesis that should be explored.

There is a question about how important, as against statistically significant, these various differences are. In discussing this it is useful to use a measure of how much the young people improved on the CGAS since this has an obvious clinical meaning and is very highly correlated with our adjusted outcome score[109]. In the anti-social group there is a difference of four points in favour of those receiving MTFC on this measure. This is made up of a favourable difference of 9 points among those still in placement (something that could reasonably be seen as clinically significant[110]) and no advantage at all among those who have left.

One way of maintaining the gains made in MTFC would be to adapt the model so that the young people did not have to move. If this approach is to be followed, costs will have to be kept down. So it is questionable whether they can be contained in a model that costs as much as MTFC-A. An urgent question is whether the behavioural techniques of MTFC, which on this evidence are probably its most important ingredient, can be taught to 'ordinary' foster carers experiencing difficulties in containing behaviour. This is the assumption on which KEEP , an apparently successful MTFC programme which has been tested with children aged 5-12 in the USA (Price, Chamberlain, Landsverk *et al.*, 2008) is based.

An alternative approach would concentrate on the follow-on placement. MTFC may be able to produce more signficant lasting change in young people with behaviour problems if there is an appropriate placement to which they can move. We do not have the evidence from this study to test this possibility. However, a decision to put

[109] R=.87 in the trimmed sample.

[110] for instance, Green and colleagues found a mean 12 point change after inpatient treatment with cases of somewhat similar complexity to MTFC and Garralda and colleagues a 7 point change (effect size 0.64) during outpatient child mental health treatment with less complex cases (Garralda, Yates and Higginson, 2000; Green, Jacobs, Beecham*, et al.*, 2007).

greater emphasis on ensuring appropriate follow-on placements would be consistent with our findings.

Chapter 15 The Young People's Stories: When and How did MTFC Help?

This chapter draws mainly on qualitative material to explore how, why and in what circumstances MTFC appeared to be helpful to the young people. It focuses principally on a purposive sample of 20 case studies of young people on the MTFC programme, which should be viewed as illustrative of different patterns observed for the MTFC group[111]. The subjects of these case studies came from a wide selection of authorities and were carefully selected to include young people with a variety of characteristics and experiences of MTFC. Three-quarters of the group selected for the case study sample had remained in their MTFC placements for six months or more but for the remainder, placements had disrupted within three months. In these case studies we draw on our telephone interviews with young people at, or shortly after, baseline and on our face-to-face interviews with them at follow-up. We also take account of the perspectives of social workers, MTFC teams and carers, drawing on qualitative and quantitative data from questionnaires they completed at all three stages of the study. Full details of sample selection for the case studies and our analytical approach are provided in Chapter 3 (Section 3.9).

15.1 More successful placements

15.1.1 Work with 'anti-social' young people

The outcome data reported in Chapter 14 suggests the possibility that MTFC may show some relative benefit for anti-social young people as a group compared to others. Isaac and Ed are examples of young people who had high scores for difficult or anti-social behaviour at baseline and showed a dramatic improvement in scores on the CGAS by follow-up. Their stories illustrate how and why MTFC may be helpful to young people with problems of this kind.

Isaac

Isaac, who was 12 years old when he entered MTFC from a residential unit, had moderate learning difficulties. He had grown up in a large and chaotic household where he had witnessed domestic violence and experienced emotional abuse and neglect. He had entered care at the age of 10 due his aggressive and often violent behaviour towards his mother and siblings and the breakdown in his relationship with his mother. He had become involved in offending and was bullied at school and in

[111] Young people's names, and, where necessary, some aspects of their stories have been changed to ensure confidentiality.

his children's home. According to his social worker he presented as very sad, confused and distressed and there was no prospect of reunification with his family.

Within two months of placement there was evidence of positive change in Isaac's behaviour. At this point his foster carer noted that *"his behaviour is already much improved"* and a clinical assessment by the MTFC team indicated a significant drop in conduct problems, although his emotional and peer problems persisted. By one-year follow-up there had been a significant reduction in his aggression and angry outbursts, although these still recurred occasionally. He continued to have weekly contact with his mother but sometimes became very upset during contact. At this point, he was still living with his MTFC foster carers and appeared settled and happy:

> *I'm settled, they look after me well.... I just treat them like me mum and dad now.*

The structured approach of the MTFC programme clearly suited Isaac, who took to it readily. According to his carer he *"could see the consequences/rewards of behaviour straight away"*. Although Isaac said he did not like the points and levels system, he nevertheless felt that it had been helpful to him:

> *I mean I didn't see the point in doing all points and levels like that and earning rewards, I thought it was stupid. …… but even though I thought it was like stupid I thought it was a bit of a help, cos, it was like a target set for me, like I've got to earn something.*

He felt that the team, and in particular the individual therapist and skills worker, *had "helped me and all that, control me temper, that's what they have done"*. Isaac also appreciated being in a single placement after his unhappy experiences in a large and chaotic family and in residential care, so this aspect of the programme clearly suited him too. He acknowledged that the supervision and boundary-setting he received were helpful and contrasted his foster carer's concern for him with the lack of care he felt he had previously experienced:

> *Cos I get treated well here, and in the others, the other people never cared about me, they just let me do what I wanted.....Yeah, they're, they're more nicer to you, and they care more about me like. Like in the others I can just like be out what time I want, but they set a time limit for me here, which is fair like so I'm not on the streets late at night.*

As these comments indicate, he had developed a very positive relationship with his foster carers, who clearly demonstrated genuine care and affection for him. He explained that: "*they treat me nice and all that and they look after me, make sure I've got the right things..... Like they're all kind to me".* His comments indicated how the quality of the parenting they provided and his trust in them not only made him feel more settled and secure but also facilitated work on his behaviour problems:

> *Just by like, when I get all angry and that, they just like spoke to me and (…) and just speak about things now if I'm in trouble. With me other carers, in the past, I couldn't speak to them or nothing……. cos I wasn't settled there, but I'm more settled here now in a family.*

Isaac's rapid adaptation to the structured nature of the programme, his strong relationship with his foster carers and the fact that a single placement clearly met his needs all appeared to contribute to the success of the placement. Another factor was his acknowledgement that his behaviour was a problem and his motivation to make use of the programme. Clearly unhappy in his residential placement, he initially hoped that if could improve his behaviour he might be able to return home and, shortly after he entered his MTFC placement, he said he liked it better than the *"trampy lads' home"* he had been in and that he wanted to *"stay here and sort out me problems".* He was also motivated to engage with school, saying that he liked learning and liked school, despite the bullying he had received. Another key ingredient in changing his behaviour was clearly a change of environment. The home and care environments he had previously lived in both appeared to have contributed to and reinforced his behaviour problems, whereas his MTFC placement provided warm, consistent and authoritative parenting.

Ed

Ed had experienced emotional abuse and domestic violence. He had a long history of angry and physically aggressive behaviour at home and of bullying, controlling and disruptive behaviour at school, where he had difficulty in making friends. He had persistent daytime enuresis and sometimes ran away. At baseline he lived with his mother who, according to the MTFC team, displaced responsibility for family problems onto him and perceived herself as a victim not only of the men in her life but also of her son. A range of previous community- based interventions had failed to resolve these problems and Ed entered MTFC at the age of 14. According to the MTFC team, he presented as lonely, stoical and unhappy.

During their initial assessment, the MTFC team judged him to be highly motivated to make use of MTFC and willing to engage with the programme. When interviewed shortly after entry to the placement, he comments suggested that this was indeed the case:

> *I thought it would help with my problems, help me in the future…They're trying to help me along for the future….with making friends and building confidence.*

At this early stage, he also hoped the programme would enable him to return home but by follow-up there was no longer any prospect of reunification and his social worker considered that he now accepted the need to remain in care. He was settled and wished to remain in his former MTFC placement, which had been converted to a

long-term placement. By one-year follow-up there had been a major improvement in Ed's behaviour, as he was no longer aggressive or disruptive, and he was looking forward to starting college. Ed's social worker considered that it was the MTFC programme which had reduced Ed's problem behaviour at home (in his placement) and at school, and had improved his problem-solving and social skills. However, according to his social worker he had continuing emotional problems, lacking confidence, close emotional ties and close friends.

There were many similarities in the reasons for Ed's positive progress on the MTFC programme. Like Isaac, he was motivated to work on his behaviour and accepted the structured nature of the programme, as his social worker's comments indicate:

> *His carers have put firm routines and boundaries in place….He responded well to rewards/points. ….He liked the fact that he knew where he stood and people were clear about expectations.*

Ed accepted the points and levels system and found it helpful:

> *I thought it was quite good. It was sort of a target to reach, sort of expectation, and it was sort of good, cos I wanted to sort of beat the expectation, sort of double it. So it was sort of a thing to push myself.*

Like Isaac, he had developed a very positive relationship with his foster carer and also said he found the MTFC team helpful, especially the skills trainer. Looking back, he felt that the programme as a whole had been helpful to him.

> *It all benefited me in a way..... It was just sort of, they would, if I didn't get something they would try and explain it to me, or if I was in a problem then they would sort of help me with it.....They've sort of just like showed me coping, ways of coping and, you know, how to stop being angry.*

Again, as with Isaac, moving from a home in which his family were unable to understand or manage his behaviour to an environment which not only provided structure and consistency but was also caring and supportive, clearly had a positive impact. As Ed's social worker observed:

> *He feels he is valued whereas that wasn't the case before. He is generally included and feels that people like him and are prepared to put themselves out for him.*

The fact that he was still living in this positive environment at follow-up, and had been settled there for over a year by this point, may also help to account for the positive outcomes at this stage in his life.

15.1.2 Work with young people not rated as 'anti-social'

Chapter 14 indicated that MTFC was generally less successful with young people who did not have identified problems of anti-social behaviour. However, among those who were not rated as anti-social, some young people did show improvement by follow-up. For example, Gordon, age 11, had experienced multiple forms of maltreatment and was described as physically aggressive, defiant, destructive of property and as exhibiting sexualised behaviour, however these behaviours were not sufficiently severe to result in his being rated anti-social. Gordon's behaviour had improved markedly and he was still in his MTFC placement at follow-up.

The programme could also be successful with some young people who engaged in risky behaviour which was potentially harmful, and whose emotional problems were not unduly severe (in comparison with others in our sample who are discussed below), as the story of Mary illustrates.

Mary
Mary, age 15, had entered care due to neglect and allegations of sexual abuse. She had been living in a residential unit but this placement had become increasingly unstable due to her troubled behaviour. She had been engaging in risky behaviour including misusing drugs and alcohol, going missing and associating with an apparently predatory male adult who had previously targeted other vulnerable young people. These problems were to some extent related to her association with a negative peer group. She was attending school on a part-time basis and displayed 'erratic' behaviour there, although she was generally doing well. Serious concerns about her troubled and troubling behaviour led to her placement in MTFC as an alternative to secure care.

Mary settled well in her MTFC placement, accepting the programme from the start and developing a positive relationship with her carer. Two months after the placement began, her social worker observed:

> *She has settled in and is very keen to please and earn points under the MTFC programme.....She has been introduced to [carer's] wider family and she seems to be investing in the placement, bonding with* [carer] *and showing respect.*

Mary valued the structure of her MTFC placement and the sense of routine and boundaries, commenting:

> *I loved it when I first moved in. I had a daily routine that I had to stick to, so I knew I wouldn't be going out and getting into trouble like I used to. I had daily things you have to do to get certain points.*

Nevertheless, she had initially found it difficult to adapt, MTFC contrasted starkly with her earlier experiences of home and care and her experience of:

> *It was hard…stricter, like trying to keep in your head certain things that you have to do every day ...and for someone who's just come from a house where you had to look after their parents then to a children's home where you just run riot basically then come into this structured programme, it was very puzzling, difficult to get your head round, but then you get used to it.*

Mary graduated from the MTFC programme after seven months but continued to be fostered by the same carer, so was still living in her former MTFC placement at one-year follow-up. She was settled, no longer misusing drugs or alcohol, less susceptible to the negative influence of peers, her risky behaviour was reduced and she had developed new leisure interests: *"I've got new friends now and ....I do like drama and stuff."* However, she had been temporarily excluded from school in the previous few months, and her experiences of sexual abuse appeared to have a continuing impact on her behaviour. Her carer noted that she continued to make false allegations of sexual abuse and she had to be supervised when in male company.

Like Ed and Isaac, Mary had accepted, and responded well to the structure and routine of the MTFC programme and the strong bond she had developed with her MTFC carer also appeared to play a very important part in the success of the placement. The programme appeared to be particularly effective in addressing her risk behaviour, though less so in relation to her more serious emotional problems and sexualised behaviour, for which she was receiving counselling. She clearly appreciated her carer's concern and support, and cited the ways she had helped to divert her from a negative peer group and from drug and alcohol abuse:

> [Carer] *will say 'she's not a very good friend and you don't want to be getting yourself in trouble or 'she's a really nice friend stay with her. I used to do like heavy drugs and alcohol and stuff and just totally a wreck so when I come here to* [MTFC carer] *this is supposed to be a fresh start and they didn't want me to go back to doing stuff.*

Again like Ed and Isaac, she was willing to engage with, and had been successfully engaged by, the MTFC team. As her carer commented:

> *MTFC suits her very much. Mary thrives on the attention of the team. She bought into it really well and seems to know it's doing her good.*

She had developed particularly positive relationships with certain members of the team, feeling that they cared about her and listened to her:

> [The programme manager] *was very strict still, kept to the rules and stuff but I felt like I could talk to her and stuff and she used to have a laugh with me ..... and [the individual therapist] is so easy to talk to.... I feel like she doesn't judge me,..like she's actually listening to me and not just 'cos its her job, 'cos she actually cares.*

She referred to the team as *'my little gang'*, commenting: *'if it wasn't for these people I'd be a total mess.'* Looking back, she felt that MTFC had turned her life around:

> *Treatment foster care was the best thing ever, I can put my hand on my heart, if it wasn't for TFC I would probably be in a secure unit by now.*

After graduating from the programme after seven months, but remaining with her carer for a total of 19 months, Mary moved onto semi-independent accommodation in supported lodgings, where she received support from the leaving care team.

15.2 Less successful placements

In the purposive selection of our case studies we included a number of young people who scores on our outcome measure either showed little change or had deteriorated by follow-up. In these cases young people sometimes showed improvement in some areas of their lives but this improvement was offset by deterioration in other areas, as in the cases of Gemma, Stacey and Oliver.

Gemma, Stacey and Oliver all had serious emotional problems at baseline and these persisted at follow-up. Gemma, age 14, had experienced neglect and sexual abuse from an early age and had been exposed to domestic violence. After entering care at the age of five she had experienced several unsuccessful at attempts at reunification with her parents and had more than 10 placement moves. She entered MTFC from a residential placement. At this point she was assessed as suffering from post-traumatic stress disorder and there were concerns about her anxiety, self-harm, somatic complaints and drug and alcohol misuse. She was associating with an anti-social peer group and this, in her carers' view, had drawn her into offending and had resulted in a criminal conviction during the year prior to baseline. She remained in her MTFC placement for 15 months.

At one-year follow-up the MTFC team reported a reduction in self-harm and absconding, but indicated that suicidal ideation remained a continuing problem. While there was no evidence of offending behaviour in the six months prior to follow-up and she had made a positive move from home tutoring to education in a specialist unit, her substance misuse and sexual risk-taking behaviour had increased in severity. On balance, there was little difference in her overall functioning compared to baseline. Gemma found it difficult to accept the points and levels system,

explaining *"I went through up and down patches"* in relation to this. Her carer reported that it had been important to award lots of points to Gemma in order to motivate her. Although her considerable emotional problems clearly required some therapeutic input, Gemma found it difficult to engage with the team's individual therapist.

Like Gemma, Stacey had entered care at the age of five after experiencing sexual abuse and neglect as well as physical and emotional abuse. She too displayed both internalising and externalising difficulties, including anxiety, self-harm, compulsive behaviour, aggression and involvement in offending. She moved to her MTFC placement from a specialist residential unit at the age of 11. She found the programme difficult to adapt to and left her MTFC placement after two months. She felt that *"it was as if they were correcting every single thing you done."* Her social worker considered that part of the problem had been that her foster carer was inexperienced. She moved from MTFC to a new foster placement in which, despite some difficulties, she felt able to settle. In this placement she appeared to feel cared for and she accepted her foster carer's attempts to deal with her anger problems and self-harm. She also valued the support of her social worker, who had been a consistent figure in her life since she first came into care. However, her deteriorating mental health subsequently led to a move to a secure mental health unit.

Oliver

Oliver, who had been diagnosed with learning difficulties and ADHD, had been accommodated at the age of nine and entered his MTFC placement at the age of 12. At home he had experienced neglect and possibly sexual abuse (although this was not confirmed), a lack of warmth from his mother and generally weak and inconsistent parenting. He had experienced multiple placement moves, was increasingly displaying aggressive behaviour and found it hard to mix with children of his own age. Prior to his move to MTFC he had made a very serious physical assault on a much younger child, displayed highly sexualised behaviour and appeared to pose a sexual risk to younger children.

Oliver accepted the MTFC programme and formed a close bond with his foster carer. One year later outcomes were somewhat mixed rather than poor. He remained with his former MTFC carer, who showed her commitment to him by agreeing to care for him long-term. Oliver was settled with her and wished to stay, and his behaviour showed some improvement, but according to the MTFC team, progress was slow. He remained anxious, still displayed some aggressive behaviour, and there were continuing concerns that he might pose a sexual risk to other children. Although there had been some improvement progress was hampered by the serious nature of his emotional difficulties.

A common factor in all three cases was the combination of behavioural difficulties with serious emotional problems. While there appeared to be some positive developments by follow-up for at least two of these young people, emotional

difficulties persisted, or had worsened significantly and their scores on our measure of global functioning, the CGAS, showed little change by follow-up. Clearly we cannot generalise from just three case studies, but these nevertheless suggest that in some cases MTFC might have greater difficulty in effecting change where young people have serious emotional problems. Although the MTFC teams did provide broader therapeutic support, the principal focus of the programme is on behavioural change, so it may not have been the most appropriate intervention for these young people. In any case, for children with such serious, long-term emotional problems, it may perhaps be unrealistic to expect significant change to occur within only one year. Nevertheless, some, like Oliver, may benefit from the stability that a placement in MTFC can potentially bring to children with such serious difficulties through the wraparound support that it provides and the extensive support and guidance provided to foster carers, who might otherwise find it difficult to persist with such challenging children.

The environment to which young people moved on leaving MTFC could also contribute to poor outcomes at follow-up, as in the cases of Alec and Max discussed below. However, scores on our global measure of outcome, the CGAS, could be influenced not only by the quality of the environment to which young people had moved to but also by the timing of that move in relation to our point of follow-up. Delia, for example, had graduated from the MTFC programme and was reported to have made excellent progress. Just a few weeks before follow-up she had moved to new foster carers, but she was missing her MTFC carers and finding it hard to settle. By follow-up, her behaviour had deteriorated and it seemed likely that this was at least in part due to her recent move from a placement she had liked and her difficulties in adapting to a new placement. At this point, it was not possible to know whether this was a temporary deterioration, possibly due to the impact of the transition, or whether the move had resulted in the loss of the gains she made while on the MTFC programme.

15.3 Placement disruption

As we saw in Chapter 14, young people whose MTFC placements ended within three months did marginally worse on our global outcome measure than those who stayed longer, although this difference was not statistically significant. Analysis of our case studies can provide an insight into some of the causes and consequences of placement disruption. The placements of Alec and Max disrupted at an early stage and outcomes were poor for both of them. For Harriet, whose placement disrupted at a much later stage, outcomes were much better. However, it would be difficult to conclude from their stories, presented below, that the timing of the disruption to their placements provides the sole explanation for the quality of outcomes at follow-up.

Alec, age 12 years, and **Max,** age 15, were both rated as 'anti-social' at baseline, and there were a number of similarities in their histories and in the factors which hampered the programme's efforts to work with them. Both had experienced emotional abuse and, in Alec's case, physical abuse too, which in both cases had been identified when they were nine years old. Alec was also known to have witnessed domestic violence. Both boys had been assessed as having special educational needs. Alec had learning difficulties and had also been assessed as having significant attention problems, for which he was receiving medication. His carers at follow-up described him as a stoical child who showed few emotions. Max's MTFC carers considered that he too had quite serious attention problems, but there was no evidence of a medical diagnosis to this effect[112].

Both had been in care for over three years and had experienced considerable placement instability as well as disruption to their education. At baseline, Alec was in an emergency foster placement and Max was in a secure children's home as a result of a conviction for robbery. Max hoped to return to his previous residential unit, which he described as *"a bit like a family".* Both of them displayed aggressive behaviour and had been involved in offending and the older boy, Max, was also misusing alcohol and drugs. Their peer relationships also caused professional concern. Alec found it difficult to make positive friendships and those friends he did have were thought by the MTFC team to have a negative influence on him, and there was concern about Max's association with an anti-social peer group.

Both boys initially appeared to settle well in their MTFC placements but subsequently absconded, initially returning to their families. Max's placement disrupted after two months and Alec's did so after three and a half months. By one-year follow-up, Alec had experienced three further placements and, when interviewed, was living in a foster placement that he had moved to a few weeks earlier. He continued to show physical aggression, displayed sexualised behaviour and had committed a number of criminal offences in the previous six months. His social worker thought that he was likely to be sentenced to secure care at his forthcoming court hearing. The pattern was similar for Max who, by one year follow-up, was in a Young Offenders Institution. After absconding from his MTFC placement he had stayed briefly with relatives and had then moved to semi-independent accommodation. While there he had begun re-offending.

Alec clearly did not accept the need to be in care and kept running home to his mother despite the fact that, according to his social worker, she was rejecting towards him. He had initially appeared to engage with the programme but his progress was undermined when he repeatedly went missing to be with his mother and became demoralised by losing points. He explained:

[112] Baseline data on Max's difficulties and family background was very limited as his social worker did not return a questionnaire at this stage.

> *It was all right and then, just as I was going on to level two, I went back on to level one, it was getting real hard so I just ended up leaving… I don't know, I just, I couldn't understand the points and then I, I kept running away.*

Alec's social worker felt that the MTFC placement had initially provided 'some benefit' to him but that this had been destabilised by *"his birth family making unrealistic promises to him about returning home, his absconding from his education placement and disengaging from his carers"*. She felt that he needed geographical distance from his family and peer group, as both reinforced his negative behaviours.

Max had also initially appeared willing to make use of the MTFC programme, explaining that he hoped it would keep him out of trouble. However, his carer felt that he rapidly became bored with the programme, partly because no education placement was available to him during the early weeks of placement as it was the school holidays (although local MTFC-A teams were advised by the national implementation team not to begin MTFC placements during the school holidays since the programme is predicated on the young people having a placement at school). They noted his inability to concentrate and to focus on one task at a time and felt he was being led astray by a negative peer group who were bullying him by phone. Max found it difficult to adapt to the points and levels system and considered that he was too old for it:

> *Like, I'm not a little kid, a baby. I think it's for younger kids, they might enjoy it, but in a way it's silly*

Why were outcomes so poor for these two young people at follow-up? The most obvious explanation is that their placements disrupted early, probably to too soon for the programme to have any potentially lasting effect, and the environments to which they moved were either unable to address their behavioural problems or actually reinforced these, for example through exposing them to the influence of a negative peer group. In Max's case, his largely unsupervised placement in the area in which he had previously lived him exposed him to the influence of his anti-social peer group and reinforced his substance misuse problems, as he himself acknowledged:

> *At first it was going well (in semi-independent accommodation)...I had stopped the crime, but cos it was in an area where I knew a lot of people I started going out , getting into more crime and the drink and the weed, I wasn't really caring.*

The disruption of their placements begs an additional question: why was the MTFC programme unsuccessful in engaging these two young people for more than a short period? First, it was clear that neither of them was willing to engage with the points and levels system for very long. Both appeared to rapidly lose motivation and any

interest in gaining points. Second, neither of them were thought by professionals to have established a close bond with their foster carers, which was a feature of the successful cases described earlier. This reluctance to invest in relationships with new carers may to some extent be related to the fact that both had experienced many previous placements and were aware that this one was intended to be temporary. It may also have been the case that qualities in these particular carers made it difficult to engage these boys, as children and young people may often 'click' with certain carers but not others.

Furthermore, Alec's MTFC placement was undermined by the actions of his birth family, as his mother led him to believe that he might be able to return home. His fantasy of returning to his mother made it hard for him to accept the need to be in care, and in such circumstances it may be more difficult to achieve positive outcomes (Sinclair, Baker, Wilson *et al.*, 2005). Alec also found it hard to come to terms with his family's behaviour towards him and such difficulties in processing past experiences within their families may sometimes contribute to looked after children's difficulties in their placements (Biehal, Ellison, Baker *et al.*, 2010).

The placement of Ben, age 15, was similarly undermined by his birth family, although this may not have been the only reason for the disruption. Ben had experienced physical and emotional abuse and witnessed domestic violence and was assessed by the MTFC team as having a severe conduct disorder. He was aggressive, impulsive, used drugs and had serious alcohol problems. Although he initially engaged well with the programme, his placement disrupted in under two months because, in the view of the MTFC team, his family: *"sought to challenge and undermine their son's commitment and co-operation with the programme"*. According to his foster carer they *"did not support the programme, rubbished the points system and did not praise his success".*

Some young people whose MTFC placements disrupted were nevertheless doing well at follow-up, as in the case of Harriet. Harriet entered MTFC at the age of 13. She was rated as anti-social but she herself considered that her principal difficulties were emotional. Harriet disliked the structured nature of the programme but nevertheless remained in her placement for eight months before it disrupted. She had previously lived with her mother and step-father and was referred to MTFC because of concerns about her behaviour the high level of conflict in the family home, the breakdown of her relationship with her mother and her poor school attendance. She was bullied at school, associated with an older peer group who encourage her to smoke and drink and she sometimes ran away.
Harriet was highly critical of the MTFC programme, insisting that her behaviour was not the problem but rather the emotional distress she felt in relation to her father's suicide:

> *It's all about behaviour and that's not it, my problems are my mum, because my dad died and she didn't tell me, it's all about that, my behaviour is ok.*

She nevertheless acknowledged that there were indeed some problems with her behaviour: *"I cope by being naughty".* Unlike Ed, Isaac and Mary, she did not accept the programme and was unwilling to engage with it, and she was particularly angry about being separated from her old peer group:

> *It needed a little bit of leeway, I think. It was the programme twenty-four/seven. .....it felt abnormal and false all the time..... At first it was all good, cos I thought I was staying out of trouble and everything, but. …I lost a lot of friends and made none, because you're around adults twenty-four/seven, so.*

The placement eventually disrupted after eight months. This was largely because Harriet's reluctance to accept the behaviour management aspects of the programme was reinforced by her mother, who actively undermined the programme. From Harriet's account it was clear that her mother reinforced her negative view of the programme*:*

> *My mum felt lots of things were done unfairly .....My mum used to break the rules all the time. I used to say I was going over to my mum's and ... she used to let me go out with my friends.*

According to the MTFC team, the placement disrupted because Harriet and her mother were no longer co-operating with the programme.

Following the breakdown of her placement, Harriet moved to live with her respite carers, who subsequently became her long-term foster carers. At follow-up she had been settled with them for several months and was doing well[113]. She was very happy in this placement, where the rules were *"just sort of normal family stuff",* and found her carers very helpful and supportive. She was no longer absconding or staying out drinking. While in MTFC she had moved from a special school to mainstream education and her schooling was generally going well. Her physical aggression and disobedience at school remained a concern, although to a lesser extent, and according to her carer she still found it hard to sustain relationships with her peers.

Although Harriet was critical of MTFC, she nevertheless acknowledged that it had been helpful to her:

> *There were good things about it, the good things were like staying off the streets, staying out of trouble, but there are other ways of doing that and I*

[113] By the time the study ended Harriet had been settled with these carers for nine months.

> *felt, I felt, in my opinion, I think the main reason is 'cos I was too old, far too mature.*

She also appreciated the way the programme had helped her return to school and felt that this had contributed to her current well-being:

> *The school lady, she was very helpful. She did lots for me in school…. Just getting me back into school and I'm, I'm heading for twelve GCSEs.... I wouldn't be in school now, I wouldn't be at home now in a nice warm house, I'd be out in that rain on the streets causing trouble. So it's, I think they gave me a chance, it gave me a chance to think and got me back into school, so.*

Her criticisms of MTFC focused on the nature of programme, rather than the individuals who delivered it, which allowed her to engage with it to some extent despite her professed reluctance to do so. Thus the fact that the placement persisted for eight months was perhaps to some extent due to the positive relationship Harriet had established with her carers:

> *The carers were absolutely lovely, it was the programme I didn't like. I didn't like where I was living but I loved who I was living with, loved them, really nice people.*

She had also developed positive relationships with members of the MTFC team, particularly the individual therapist and the skills worker: *'I felt I could talk to them because they were sort of on my level',* but she was unhappy that what she told them was shared in clinical team meetings and videoed to facilitate distance supervision*:*

> *So it wasn't confidential, so sometimes I didn't feel I could open up to them, because it would be talked about.*

Why, then, was Harriet doing well at follow-up, relative to baseline, despite her reluctance to engage with the MTFC programme and the disruption of her MTFC placement. As her social worker observed, the programme had given her a period of stability and consistency and had reintegrated her into school. Her placement on the MTFC programme may have resulted in positive chain effect, as the diversion from negative peers, behavioural change, reintegration into school and development of relationships with the respite carers who were subsequently to become her long-term carers may all have improved the chance that her next placement would be a success. In addition, the environmental change embodied by the move to an MTFC placement clearly contributed to behavioural change, just as Harriet's ability to sustain this change may have been enhanced in the environmental context of the follow-on foster placement.

As with Mary, Ed and Isaac, Harriet's willingness and ability to develop positive relationships with both her MTFC carers and follow-on carers and also with the MTFC team, and presumably the skills and empathy of the adults concerned which facilitated the development of these relationships, appeared to contribute to the positive changes. It seems likely that the quality of these relationships helped to keep Harriet on the programme long enough to benefit from it. It is also possible, as Harriet herself acknowledged, that despite her resistance to it, the behaviour management focus of the programme had helped her *"stay out of trouble*". However, she had particularly valued the therapeutic aspects of the programme:

> *Some things were good, I think the things that are good is like all of the like, the therapy sessions and someone coming into school with you.*

Evidence from these case studies suggests that the reasons for placement disruption, and the timing of that disruption, are complex in these cases, placement disruption resulted from the interplay of several factors, including young people's willingness to accept the structured nature of the programme, the quality of their relationships with the foster carers and the influence of their birth families. The wider literature on foster care indicates that disruption is generally associated with the characteristics of the child, in terms of difficult behaviour and whether they accept being fostered ,the parenting style of the carers, the 'fit' and relationship between carer and child and the nature of any contact with birth families (see Sinclair, 2005).

In the chapter which follows, we will draw together the themes which have emerged from the analysis of these case studies and from the analysis of qualitative data on other young people in the sample.

Chapter 16 What Made a Difference? Views of Young People, Carers and MTFC Teams

The purpose of the last chapter was to explore, through case studies, how, why and in what circumstances placement in MTFC appeared to be more, or less, successful. We now draw together some of the themes that emerged from those case studies and present additional data from others, as well as from telephone interviews with young people we spoke to shortly after they had moved to their MTFC placements[114]. We also draw on data from questionnaires completed by 60 MTFC team staff around three months after the placements began, as well as questionnaires completed by 43 MTFC foster carers at the same stage.

This chapter first discusses key elements of the MTFC programme and considers the views of young people and carers on whether or not these were helpful. It then discusses qualitative data from young people, carers and MTFC teams on other factors which appeared to have an impact on the success of MTFC. These were factors which might help or hinder progress in any care placement. Finally, it presents the views of young people who were positive about their placement in MTFC and of others who expressed dissatisfaction with the programme.

16.1 Elements of the MTFC programme

Analysis of our case studies suggested a number of factors that contributed to young people's progress, or lack of it, while they were on the MTFC programme. Of these, three were intrinsic to the programme itself: the structured nature of the programme, the provision of intensive support to foster carers and the wraparound service it provided.

16.1.1 The structured nature of the programme

The MTFC programme provided consistent care and supervision and employed the token economy of the points and levels system to encourage and reinforce positive behaviours. The stories of the young people discussed in the last chapter suggest that the structured nature of the MTFC programme was helpful to a number of them, including some of those who did not particularly like it. The majority foster carers who returned questionnaires in the early months of placement cited the structured nature

[114] Due to our difficulties in making contact with young people in order to obtain their consent to the study, in 31 cases our baseline telephone interviews were conducted after they had moved to their MTFC placements. In these circumstances the interview was adapted to take account of their current situation. These young people accounted for just 30 per cent of those who received MTFC.

of the programme as a key contributor to its success and often referred specifically to the points and levels system. For example, one MTFC carer, who had many years of experience as a foster carer, commented: *'the points system is what has been missing for lots of young people'*. Others were equally positive:

> *Puts clear boundaries in place. Shows there are consequences to behaviour - good and bad.*
>
> *This programme has put a structure in place for young person to work with. Before in her placements she had no structure for daily life and was left to her own ways. Now she has rules that she has to keep to.*
>
> *It suits young person's needs perfectly. The points system offers a very clear picture of what is required from him and rewards good behaviour in the correct way.*
>
> *Points and levels rewards are brilliant for her. See this on daily basis. It's a good thing, gives a second chance.*
>
> *Points system motivates the young person. Spending points, buying privileges brings the desired reward for good behaviour.*
>
> *Responds to points and praise. Needs boundaries and routine. Likes to test but likes to feel safe knowing she cannot get her own way. She understands consequences…and enjoys rewards.*

Even carers who also identified problems in their experience of the programme were often very enthusiastic about the effectiveness of its structured approach:

> *Perfect – the fact that they single out behaviours, address them, introduce skills to sort out behaviour… it's working 'bang on'.*
>
> *He doesn't like it when he loses points, and loves it when he gains them. The enhancement of levels give him something to work for, and he can be proud of what he's achieved. The PDR sheet highlights the traits that the team (including carers) needs to concentrate on and it's all highly organised.*

A few carers, however, felt that the MTFC programme did not suit certain young people:

> *She is aware she is part of a programme which gets in the way of regular family life – she just wants a foster family.*
>
> *Hate having to buy time out, and I think it is a bit harsh. Can be a vicious circle - you bend the rules when she runs off and loses all her points, the next day she is on Level 1 and she runs off again and then self harms to get away with doing Level 1 - can be a vicious circle.*

Not sure if the constant adult attention is good for him.

Interviews with young people revealed that some were initially taken aback by the points and levels system as they had not encountered anything like it before:

It's alright, a bit complicated and a bit weird. I've never been on a programme like this before, …You earn points to get things.

As we did not specifically ask about the points and levels system during our baseline interviews, the young people who raised it with us were a self-selected group and tended to be those who wished to complain about it. They were in the early stages of their placements and finding the system difficult to accept at this point. Although the points and levels system had been explained to them before they entered the placement, some were clearly surprised at how consistently they were applied. For example, one boy who had entered his placement two weeks earlier told us: *'I didn't think it would matter if you got them or not'.* This placement disrupted six weeks later. Another commented:

It's really strict, it's really rubbish, I had all my stuff taken off me and I have to do stupid things I would have done anyway for points.

In some cases a reluctance to accept the points system was linked to the young person's reluctance to acknowledge that their behaviour was a problem, as in the case of Harriet reported in the last chapter. Another young person said that all he really wanted was to spend time with his mother and that he did not *'need to do points'*. However, another girl, who had clearly also been reluctant to embark on the points and levels programme when she moved to MTFC after her previous foster placement had disrupted, appeared to be progressing well:

They said had to earn points to go out and I didn't want to do it because I like to go out - I have to go out. What is it like? I have to be good at school, get up with a smile, eat my breakfast, things like that.

Some argued that they were too old for it, or objected that it was simply not 'normal' to live in this way. For example, Justin, age 12, explained why he refused to accept the points system:

That doesn't happen in a normal family and they're trying to put you in a normal family and that isn't normal.

His carer felt that *'the programme would never work for him as he tries to manipulate the system and often refuses to co-operate.'* His social worker's comments suggested that his reluctance to engage with the programme may have been partly due to his deep-rooted fear of failure. Two others similarly compared MTFC

unfavourably with the 'normality' of ordinary foster placements, which gave greater freedom:

> *Treatment foster care is all about points, you have to buy TV and going out. You're like a prisoner you can't go out, have to ask and do chores. It's different to normal foster care - you can go out all the time, you have more freedom.*

> *The points aren't helpful … I would rather be in normal foster care 'cos here you're on points, you can't go out, you have to buy points to do everything and you have points taken off you.*

However, one girl who disliked the point system nevertheless seemed to have settled well due to the relationships she had built with the carers and the team, despite her dislike of the points system:

> *(The points and level system) isn't good - it does your head in sometimes ….(but) the people are nice, the team and the carers.*

A number of other young people interviewed were positive about the points and levels system and felt it had been helpful. As one young person said:

> *They looked after me really well. You get loads of points if you're good - doing chores, tidying your room. If you get really good score can go anywhere - parks and everything.*

As we saw in the last chapter, Isaac, Ed, Mary and Oliver were positive about the points and levels system and felt it had been helpful, as did a number of others in our case study sample. For example, David, age 14, felt the behavioural management approach of the programme had helped him with his anger and had boosted his self-esteem:

> *It made me feel better about myself sometimes. Like if I did something that was really good I got the points, so I just felt well, that's good, I'll do it again.*

Richard, age 12, said he found the points and levels system '*fun, I really enjoyed it'* and Jamie, age 11, seemed to appreciate the structure that the programme provided:

> *It worked, because it focuses your mind on getting points and getting what we want, getting what you want to do the next day.*

The MTFC placement also went very well for Delia, age 11**,** both in her own view and the view of the team. She was pleased by her achievement and said:

> *I really enjoyed it, it turned me upside down… I knew when I went wrong, because they said 'Oh you went wrong, this is how you could improve it' and I improved it….my foster carers that I had were really nice people. They weren't very strict but they weren't very, very soft, they were in between. They were like, oh if you do this you earn points, if you don't do this you'll actually have them taken away.*

Another girl had been anxious about both the MTFC carers and the points system but now thought that the carers were '*lovely*' and the points were '*very helpful*':

> *It has changed my behaviour … my behaviour before was a disaster, I wouldn't do anything. The points have made the difference.*

16.1.2 Intensive support to foster carers

Previous research on foster care has shown that difficult behaviour by children and young people can lead to a deterioration of relationships, sometimes leading to a downward spiral in which difficult behaviour results in rejection by the carer, potentially reinforcing the difficult behaviour and ultimately leading to placement disruption. The MTFC programme provides intensive support to carers through weekly supervision, the availability of 24 hour a day support, the use of the Parent Daily Report system to monitor not only child behaviour but also carer stress and the regular provision of respite care. Many carers spoke highly of the training and support that they received, as reported in Chapter 10.

Previous research has found that the provision of intensive support to the foster carers of very challenging children may help to maintain the stability of placements (Walker, Hill and Triseliotis, 2002). By sharing day-to-day responsibility for behaviour management, the programme may help to address the latter by relieving stress on foster carers looking after very challenging children.

Some carers singled out the distance that the points and levels system creates between the carer and the sanction as a particular strength of the programme. According to several foster carers, the MTFC programme helped to ensure that relationships remained positive. By displacing the ultimate responsibility for discipline from the carer to the team, it was easier for young people to view their carers as allies in the joint enterprise of gaining points. As Lucy's carer explained, this displacement could help to keep relationships positive: *'we're not the enforcers, the team is.'* Mary's carer similarly found that the depersonalisation of discipline, through the use of the points and levels system '*relieved a lot of the stress'.* Other carers held similar views on this aspect of the programme:

> *Very helpful. She needs direction, clear boundaries set every day. Rewards system works well. Anger is directed at the programme not the carer.*
>
> *Structured - these young people need that. Takes away responsibility/sting from carer. Consequences are down to points not person. Will be very helpful for this young person - his behaviour is already much improved.*
>
> *If something is applied that she's not happy with, she sees it as team decision so it doesn't get in way of the relationship with the carer.*

Any loss of points could be ascribed to the requirements of the programme rather than the carer in person, making it easier for the carer to sustain the young person's engagement in a developing therapeutic alliance. By relieving carer stress in this way, the structured nature of the programme may potentially contribute to placement stability.

16.1.3 The wraparound approach of MTFC

As we saw in the previous chapter, a number of the young people commented on the help provided by the individual therapist or skills worker on the team. They valued the relationships they developed with these workers and felt that they had been helped by them. Several mentioned that they welcomed the therapeutic input from the team. However, as we saw in Chapter 10, at least 13 of the 16 MTFC teams who returned questionnaires indicated that staff shortages were a problem which hampered their work. Four foster carers also mentioned difficulties created by staff shortages in different teams, which had resulted in a lack of therapeutic input, either from individual therapists or birth family therapists.

The MTFC teams also worked hard to find educational placements for young people who were without adequate provision or had disengaged from school, and worked with schools to help them address their behaviour problems. This work was valuable, not only because of the intrinsic value of education but also because involvement in education could help to structure young people's time and give them a sense of achievement. For those who had settled in school before moving on to a new placement, reintegration into school could potentially remove some of the stress on that placement. Some young people in the MTFC group moved from mainstream schools to special schools, which may have been better able to meet their needs. Several carers mentioned the impact of the programme on the young people's schooling:

> [The programme] *has got him into a proper school, he's made friends and is more confident.*

> *School think [the programme] is fantastic. They've seen massive improvements in her.*
>
> [The programme] *gives structure that she hasn't had in her life, clear rewards and consequences, and a good focus on her schooling.*

However, as we saw in Chapter 12, there was no significant improvement in rates of truancy and exclusion from school by follow-up. Some MTFC staff noted on their questionnaires that their work with the young person had also been hampered by problems with education provision and support. Two mentioned the lack of full-time educational provision and one noted that the school placement available was inappropriate. Two others noted that the young people's schools were negative about MTFC and unwilling to work with the team and another two had some criticism for their team's own education support worker, who was not thought to be working appropriately with these young people.

16. 2 What other factors helped or hindered progress?

Analysis of our case studies suggested that a number of additional factors helped, or hindered, young people's progress on the programme. We draw on additional qualitative data from young people, carers and MTFC teams to explore these issues, which are those which might apply to any form of foster care.

16.2.1 Removal to a new environment providing close supervision

Evidence from our case studies suggests that one of the ways in which the programme may have had an impact was through the removal of young people to a single placement and, where necessary, through diversion from anti social peers. For Isaac, an anti-social young person who did well on the programme, removal from the chaotic, neglectful and violent environment at home and from the non-nurturing, bullying environment of his residential unit to one in which he felt cared for and received consistent and authoritative parenting, clearly contributed to the positive outcomes evident at follow-up. Perhaps equally important was the fact that he remained settled in this environment at the point at which outcomes were assessed.

Lucy, age 12, commented on the impact that her family and peer environment had had on her behaviour. She had entered care as a result of her violent behaviour towards her mother, who had problems of drug and alcohol misuse, and her involvement in offending, and she also had problems with school attendance:

> *Cos at my mum's house I was allowed to do absolutely what I wanted, I used to go out till like eleven o'clock and stuff.*

When interviewed at follow-up Lucy said that MTFC had helped her to change:

> *Cos of my behaviour, I wanted to change it but when I was living at home all my friends were around me and I kind of couldn't, 'cos I felt like I was doing something wrong even though I was trying to change.*

David had entered care at the age of 14 due to his mother's inability to manage his violent and oppositional behaviour within the home. He had been physically abused by his father and had witnessed domestic violence. He spent six months in a residential unit prior to his entry to MTFC and during this six-month period there was no evidence of the violent and defiant behaviour that had let to his entry to care.

During his time on the programme David's school attendance improved, as he began to attend full-time in order to avoid losing points. This changed with a subsequent change of environment, as once he moved on to a new foster placement David began to truant once again.

16.2.2 Relationships with foster carers

Many of the young people spoke warmly of their relationships with their foster carers. All social work interventions operate through the medium of relationships and these may provide a vehicle for the successful delivery of the structured aspects of interventions (Biehal, 2008). The wider research on foster care has shown that positive relationships with carers are a key ingredient in successful foster placements (see, for example, Sinclair, 2005; Sinclair, Baker, Wilson *et al.*, 2005). The 'fit' and 'chemistry' between carer and child has previously been found to be important, although some children undoubtedly find it easier to form relationships than others.

Over three-quarters of the young people we spoke to in the early weeks after placement commented very positively on their experience of it so far, and in virtually all of these cases they spoke of how much they liked their carers. Their relationship with their carers was in most cases the first thing they alluded to when asked about the placement. Comments like: *'I like them here'* were very common and a few mentioned how much they liked being in a family setting. Some also alluded to enjoying the activities they had the opportunity to do in the placements:

> *I like being here, I like (the carers) … I'm treated as part of the family … I feel safe here … I love them to bits, they'll do anything for me - well not everything but if I need anything they'll give it to me. They are someone I can talk to, I trust them.*

> *Brilliant. I really would like to stay. Sue, she's lovely and Jenny (carer's daughter) is really good.*

It's nice, I get what I want. They're a nice family, just C., I live with but she has three daughters and granddaughters who pop in and out.

I like being here and I like the person I am with.

It's nice here. I get to do stuff (like go swimming). I like the people looking after me.

I've got loads of friends and I like the people I'm staying with. They're funny, kind and if I do something wrong sometimes they don't shout at me, they just tell me that's wrong. … I really like it here.

One child clearly felt so at home in this placement that he no longer considered himself to be looked after:

Brilliant - I really would like to stay at my foster carer's. She's lovely. Really good understanding and supportive people. Nothing bad, it's all good…..they treat me as family. I feel safe. I love them. They do things for me and give me things. I can talk to them and trust them. I left care when I was 10 and came here.

Several mentioned that they wanted to stay because they were treated better than they had been in previous placements, where they had had unhappy experiences: their reason for wanting to stay:

They're kind to you, better than before (in a children's home). … (Carer) treats me nice here.

If I do something wrong sometimes they don't shout at me, they just say that's wrong.

Really, really nice foster carers, probably best I've had, not like other foster carers, don't shout, don't swear, laid back and easy going.

They have two cats and two dogs, it's like a zoo. Plenty of food. Don't slap you and treat me like last foster carers did.

16.2.3 Engagement

For the programme to work effectively, young people had to accept it and be motivated to do well on it. Several foster carers alluded to the need for motivation to make use of the programme on the part of young people: *'they have to really want it.*' As another carer commented:

In order for the programme to work, the young person really needs to buy into it.

Some young people took to it straight away, others did after initial reluctance while others engaged with it initially and then lost motivation. As we saw from the case studies discussed in the previous chapter, some young people 'bought in' to the programme readily while others were unwilling to engage with its structured approach. In some cases reported in that chapter, the young people's relationships with their carers appeared to be linked to their willingness to co-operate with the programme.

In answer to a question about what, if anything, had hampered the work of the team during the first three months of placement, seven questionnaires returned by MTFC teams reported difficulties in engaging the young people:

> *Lack of engagement with the programme. Young person will not stay in the placement or eat with the carers.*
>
> *Experienced carers applied points but young person hostile and opposed.... refused any involvement.*
>
> *Initially the young person did not want to engage with the individual therapist and consequently progress in this area has been slow.*

In one case the team reported that although the carers were very experienced and were implementing the model well, it was not working successfully at this stage because the young person was '*hostile and opposed'.* The carer reported:

> *If she engaged fully with the programme then I think she would benefit. She is quite forceful and it can be like dealing with an adult. She doesn't like reminding of points.*

A reluctance to engage with the programme could sometimes be related to a young person's reluctance to accept the need to be in care:

> *The young person is unwilling to engage in any work with the skills trainer or individual therapist. He is angry at being looked after and this is hampering the process. He is attending sessions but refusing to acknowledge difficulties or accept his part in situations.*

In some cases, the young people had absconded regularly, making it difficult for carers and MTFC staff to build relationships and engage them:

> *Young person absconds and misses skills trainer or individual therapy sessions.*

One girl who, who had lived with 11 different families, thought that '*foster families are all weirdos*' and clearly did not settle in her MTFC placement.

A few foster carers felt that the child in question did not fully understand the programme, sometimes due to their young age, and that this hampered engagement. One carer who was positive about the value of the programme to the young person she was currently looking after reported that a previous child she had cared for '*did not understand and placed no value on the rewards, so nothing to work at'*. Two other carers noted:

> *I don't think the programme was doing anything for him because he doesn't have that connection in his head - difficult for him to engage in lots of things. He kept a lot of things bottled up. He's never learned how to be a child or learnt how to deal with emotions.*

> [The programme] *was in my opinion too difficult for him to understand. He could not 100 per cent grasp the points system. Also, what was his end goal? The plan was for him to go back to where he came from, so he didn't see why he should go along with the rules.*

16.2.4 The influence of birth families

We saw earlier that placements in MTFC could sometimes be undermined by birth families, as in the cases of Harriet, Alec, Ben and Max. MTFC teams reported that the actions or influence of birth families had hindered progress with three-quarters of the 60 young people on whom questionnaires were returned. At follow-up, MTFC teams and social workers also reported that the actions of birth families had contributed to the ending of the MTFC placement in at least 16 cases. Although it may be difficult to gain support for the programme from some families, a lack of this support may clearly put the placement at risk. Even where there is no plan to return young people home, careful work with families is likely to be needed to prevent them undermining the placement.

MTFC team staff reported that it could be difficult to engage parents in work with the birth family therapist. In some cases, contact with parents was thought to undermine the placement:

> *Sometimes contact gets in the way… (the child) and mum mirror each other's behaviour.*

In several cases, the actions of parents and the pull of the family were perceived by both the team and the foster carer to be reinforcing the young person's reluctance to engage with the programme and to be undermining the placement.

> *Mum is very negative about professionals in her house and this hampers work.*

> *Mum keeps withdrawing her from placement – three times within less than three months. ……..Mum sabotaging via purchasing mobile phone for child, facilitating her running away, etc.*

In other cases, the team felt that young people sometimes lost motivation to work on the programme because of parents' unexpected decisions either to have them home or not to accept them back:

> *Birth mum who has not looked after children for years said she was thinking of having the young person live with her. This negated all our efforts. The prospect of living with mum removed remaining inhibitions young person felt towards carers.*

> *Mother is unlikely to agree to have child return home and she is currently late for contact visits and refuses to support her on medical visits, etc. Child agreed to come on the programme because they would work with her and her family and she saw MTFC as providing the best opportunity for her to return home. When she is told that rehabilitation is unlikely it is expected that she will lose motivation to work on programme.*

16.2.5 The nature of the placement at follow-up

For those who had left their MTFC placements by one-year follow-up, much would appear to depend on the nature of the environment to which they moved. As we saw in the previous chapter, although Harriet's placement disrupted she moved to live with her former respite carers, who she already knew well and who were familiar with the MTFC model, whereas Max experienced several months of instability and moved to an environment in which he was neither supervised nor diverted from anti-social peers.

We saw in Chapter 14 that, among the MTFC group, involvement in criminal behaviour marked out those anti-social young people who had left their MTFC placements. In a few cases, it was young people's offending that directly led to the placement disruption, for example if they were sentenced to secure accommodation, but this was not always the case. For others, such as Alec and Max, criminal behaviour had not directly provoked the disruption of their placements but was instead a consequence of that disruption. Their reoffending had occurred in the environments to which they moved after they had left their MTFC placements.

16.2.6 What hindered settling in MTFC?

Around three months after the young people entered their MTFC placements, MTFC teams were also asked about the extent to which a range of difficulties were evident for the young person in their current placement either ‘a great deal, ‘to a limited extent’ or ‘not at all.’ Their responses were compared to social worker reports on difficulties experienced in alternative types of placements, to assess whether or not any difficulties identified were specific to young people on the MTFC programme. As Table 16.1 shows, the difficulties reported to be present either to some extent or to a large extent were evident, to some degree, in all types of placement.

Table 16.1 Current difficulties present in the index placement per cent n=127

	MTFC (n=60)	*Other foster care* (n=28)	*Local authority residential* (n=17)	*Other residential* (n=22)
Qualities in the carer(s)	30	23	41	27
Qualities in the young person	81	65	88	73
Relationship between the two	53	44	65	50
Actions/influence of the birth family	75	74	94	80
Problems with schooling	87	68	82	50
Influence of the young person’s peer group	63	64	100	82
A lack of resources	33	43	38	18
Placement inappropriate for young person	15	15	24	23

Across all groups, qualities in the young person and the actions or influence of birth families were reported to cause difficulties. There was some indication that negative peer influences were a particular problem in residential placements, but numbers were too small to test for the statistical significance of differences between the placement groups. Across all placements some children were thought to have been inappropriately placed. This was the view of MTFC staff in relation to 15 per cent (nine) of the young people on whom questionnaires were returned at this stage, in some cases after the placement had disrupted.

Some MTFC staff noted that a combination of factors had hampered the work of the team. For example, Harry had initially made good progress but the placement was reported to have disrupted due to ‘external events and family dysfunction’. The respondent felt that the team had engaged the young person well, that the carers had worked well with him and that overall the team had delivered the programme as intended. However, problems with the team’s ‘unhelpful’ education support worker were noted and it was acknowledged, with hindsight, that the team had allowed the young person’s parent to become detached. A failure in effective inter-agency working was also acknowledged: when the young person was convicted for an

offence the court had not formally sentenced him to MTFC so it had been easy for him to end the placement.

16.3 Young people's views of MTFC

Young people's views of MTFC during the three months after they entered their foster placements echo some of the themes identified above. Some reflected back on their earlier expectations and felt that the reality had proved to be worse than they had expected, while others thought it was a lot better:

> *They didn't tell us half the things. Just that it was level one, then two and three and you could go out. It was a real shock.*

> *I did get told what to expect and I saw some pictures of my new family and I was expecting for them to be horrible - I don't know why. I didn't get told about the rewards, only the points really. … I thought they would be strict but they're not they're lovely.*

16.3.1 Acceptance of MTFC

During our initial telephone interviews with young people they were asked whether they would like to stay or move from their current placement. Among the young people interviewed after they had moved to MTFC, two-thirds expressed a wish to remain there. Of the remaining third who did not express a wish to remain in MTFC, most had mixed feelings and only one spoke completely negatively about being there. We also asked whether they expected the placement to be helpful to them in any way and, if they did, we briefly explored why they thought it might be helpful. Some were positive about the scheme right from the start:

> *It seems to be helping me - it feels OK here in just a week.*

Others had initially had difficulty in accepting the programme but now perceived it to be helpful:

> *I didn't expect it to be helpful but I have calmed down a lot. I don't hit people as much and I am not being bullied as much.*
> *Yes it has been helpful. I'm alright now I used to hate being on it but I don't hate it now. There are loads of people who want to help me from the MTFC team - A sees me once a week and takes me out because she's quite sporty. B talks to me about my self-esteem and tries to help me. C helps (the carer) - she's like a social worker. …There are lots of people in the team to help me. I get along with all of them.*

It's alright here, OK. It's really fair, there is nothing unfair. ….. (It is helpful) because they will help me deal with my problems. The team are helpful too, especially the skills trainer.

Several others felt that their behaviour had already improved as a result of the programme:

Like before … I was like a troublemaker, but this has changed me. I don't get in trouble as much anymore.

Really, really helpful. It changed my attitude and behaviour. Now I tidy my room, having a bath - I never used to do that.

I want to stay here and sort out my problems - my behaviour and anger, work on my anger.

For some of those who accepted that their behaviour was problematic, their motivation to make use of MTFC was to some extent underpinned by a hope that if they changed, they might be able to return home:

If someone phoned me after this and said 'K you're going home' I'd be made up, but I know I have to sort my behaviour first - to work on that.

I will be better than I was. I used to hit everyone at home but when I go back I know I am not going to do it.

So I can improve and go home.

One young person, who said she hoped to return home to her mother, recognised that she might benefit from more consistent parenting than she had previously received at home:

Mum … doesn't give me any rules so you'd end up taking over. She doesn't know how to be a parent.

16.3.2 Dissatisfaction with MTFC

Five of the young people interviewed shortly after they moved to MTFC clearly did not like the programme at this stage. Their negative views of the points and levels system have already been presented. These young people told us that they did not find the programme helpful. Some may have been difficult to engage because they did not accept that they needed this kind of help, or that they needed to be looked after at all. For example, one boy who explained that he did not want to be in foster care at all also said that he did not want to see the team

Reasons for not wanting to stay in MTFC were sometimes about wanting to return to live with someone else or, in two cases, due to a dislike of the restrictions placed on them:

> *I want to live back with mum.*
>
> *I want to go back to (previous foster carer). We had a special relationship and understanding.*
>
> *It's bad here – everything, 99 per cent of the time I am doing something I don't want (for example, long walks). I don't get a chance or a say.*
>
> *Sometimes I want to move, points and levels are not good, it does your head in sometimes.*

This placement disrupted after only two weeks. Those who did not wish to remain in MTFC appeared reluctant to engage with their carers and with the programme. Young people who were not motivated to make use of the programme to change their behaviour and did not see that it had any relevance to them were clearly very difficult to engage.

16.4 Summary

Interviews with MTFC teams, MTFC carers and young people allowed us to develop a deeper understanding of what was helpful about MTFC and what was not so helpful. The structured programme and intensive support was seen as very helpful by the majority of carers, while there was more mixed views from young people.

Section 5: Conclusion

Chapter 17 Conclusion

17.1 The study: issues in design and recruitment

The CaPE study was commissioned by the former Department for Children, Schools and Families and the Institute of Psychiatry to evaluate the implementation of the Multidimensional Treatment Foster Care programme for adolescents in England (MTFC-A). This is one of a suite of MTFC programmes developed for different populations that have been piloted in England. This evaluation of MTFC-A[115] has been undertaken across18 local authorities in England who took part in the MTFC-A programme. It succeeded in recruiting 219 young people in total and the total number who received treatment foster care (106) represents 63 per cent of the young people who had been placed by the national MTFC-A programme during approximately the same time period. Before considering the results, a number of strengths and limitations of the study need to be outlined along with their implications for the interpretations of the results that we have found.

The Cochrane systematic review of MTFC highlighted the need for studies conducted by independent researchers. This study is only the second independent evaluation of the programme. The first was conducted by members of the same research team (Biehal, Ellison, Sinclair *et al.*, 2010; Biehal, Ellison and Sinclair, 2011). The research team consisted of experts in social care research based at University of York and in clinical trials research in mental health based at the University of Manchester. This team composition was designed to reflect the fact that the MTFC programme itself attempted to bridge social care and health agencies and address the multi-faceted social and health needs of looked after young people.

One strength of this team lies in the diverse nature of the expertise it brought to the project and this is reflected in in the design and the analysis which used some of the most robust methods both from social science and health disciplines. A feature of the study was a detailed, pre-specified analysis plan and the pre-selection of a nominated primary outcome measure for study. This pre-specification aims to avoid the errors that can be introduced by multiple analyses of multiple outcomes after the event. However, we have also complemented it, as will be seen, with some carefully specified exploratory analyses of the complex data guided by hypotheses put forward before the main analysis had been done.

The primary outcome measure chosen reflected the multi-dimensional targets of the intervention and was designed to provide a method of synthesising what were anticipated to be incomplete data sets from multiple sources to be collected in the study. It had the added advantage of allowing a research rating from triangulated

[115] The MTFC-A programme has been referred to as MTFC throughout the report.

reports that could itself be blind to intervention allocation. This HoNOSCA/C-GAS method, details of which are given in our methodology chapter, worked well in practice.

The CaPE study met its overall recruitment target (we had planned a total sample of 220 and actually recruited 219). However, there were difficulties in the way this was achieved that have important implications both for the analysis of the trial and for understanding both the intervention and the service context evaluated. We had initially intended that the bulk of enrolment in CaPE would be into a random allocation study (target n=130) with the remainder into an observational case comparison study. In the event, we only achieved a sample of 34 in the RCT cohort. This was due to a number of factors, including the patchy acceptance of a random allocation method by participating local authorities and the often intermittent flow of young people referred into the overall MTFC programme itself. Furthermore, general recruitment into both arms of the study was complicated by additional factors intrinsic to the managerial and service context of UK social care. These barriers to recruitment and their implications are discussed in Chapter 3. In summary, the pattern of placement in MTFC within authorities illustrated not only the strategic pressures on authority managers but also the lack of consistent referral pathways into interventions for young people in care in England. A consequence of these influences on placement decisions was that authority managers were more reluctant to accept random allocation.

A strength of the RCT design is that, in an ITT analysis, the experimental and control groups are likely to be balanced, as was indeed the case in this study. The random allocation method did not exert a definable bias in recruitment procedures, as there was no difference in baseline C-GAS and HoNOSCA scores between the RCT cohort and the MTFC group in the observational sample. In contrast, there was an imbalance in baseline variables across the two arms of the observational study. This was expected, but had important consequences for the analysis that we discuss below. The very good balance between the groups in the random allocation cohort reflects the power of this design to generate equivalent parallel groups for study in this kind of complex environment. It is a weakness of our eventual evaluation that the RCT arm was relatively small - but a strength that we showed over time that it could be done at all, given the small number of RCTs previously undertaken in UK studies of social work with children. Much has been learned about the process of conducting RCTs in children's social care in England. This has been briefly discussed in Chapter 3 and will be the subject of a future publication by the research team.

Our recruitment experience in the trial has implications for service development in social care. In many ways the pre-conditions for an effective experimental trial of an intervention bear an important similarity to the necessary conditions for equitable and efficient service provision in the community. The systematic identification of need, explicit referral pathways on the basis of that need to identify intervention

programmes which have an evidence base and the allocation of resource according to need rather than other priorities are all arguably aspects of modern service provision which also enable easier and more rigorous ascertainment of effectiveness.

17.2 The nature of the sample

The inclusion criteria for the CaPE trial were for looked after children at risk of repeated placement breakdown, with complex difficulties including mental health and behavioural problems. In consequence, the profile of the young people studied reflects a particularly impaired and vulnerable group. Nearly all had experienced some form of maltreatment and half had suffered abuse or neglect in their pre-school years. As a group, they had extremely difficult family backgrounds with parental offending, substance misuse and witnessing domestic violence being common. Parenting was also poor with a failure to provide consistency and boundaries in evidence. The sample included a disproportionate number of older entrants to care, compared to patterns for the national population of looked after children. Over three-quarters had last entered care at the age of five or over, and were likely to be particularly troubled as a consequence of their longer exposure to adversity in their families. Many had experienced considerable placement instability, including failed attempts at reunification. On average, they had had almost three placements in the year prior to the study.

Education disruption and need was also very high - only half were in mainstream education, there were high levels of special educational needs and high levels of truancy. There was a much higher level of offending than in the general care population. Nearly two-thirds had scores in the abnormal range for difficulties on the SDQ and available data suggests relatively very high numbers of young people scoring in the clinical range on the CBCL; in particular high numbers with externalising problems. Not surprisingly given the high proportion with experience of of maltreatment, the limited data available suggested high levels of mental health difficulties, with half of those for whom we had data having symptoms consistent with a clinical level of Post Traumatic Stress Disorder (PTSD). Data also suggested high levels of anxiety, depression and hyperactivity.

These are characteristics of the whole cohort. As we have seen in Chapter 6, scores for general social functioning (on the C-GAS) for young people recruited into the MTFC programme in the observational study indicated that they were more severely impaired at baseline than the comparison group. Professional reports indicated that they were more likely to be physically aggressive, to display sexualised behavior, run away and to have self-harmed. They were also more likely to have scores over the clinical threshold on the SDQ. Their scores on this measure are comparable to those for young people looked after in residential care. This finding is consistent with the way the MTFC implementation was used in local authorities – often as an alternative

for young people currently in external residential placements or those judged to be in need of them.

17.3 The interventions received

The MTFC programme was developed by the Oregon Social Learning Centre in the USA. It aims to provide close supervision in a foster placement accommodating a single child which, in the English MTFC-A programme, is intended to last for nine to 12 months followed by three months of aftercare support. It is an intensive intervention which includes a structured behavior management programme and a wraparound service provided by a clinical team, as described in Chapters 2 and 9. It provides a high level of support to foster carers, including weekly meetings for group supervision and the availability of 24 hour a day support, which many carers in the study really valued. The MTFC teams experienced some difficulties with recruitment and retention of both carers and staff and there were concerns in some cases about the lack of experience of the carers, who were often new to fostering and thus unprepared for such challenging young people. However, the majority of carers were rated highly by the MTFC teams, who reported that carers' fidelity to the model was good in most cases. In most cases the carers also spoke highly of the team and the support they received.

Despite a strong desire among a large proportion of the young people to return home to their families, due to the targeting of the MTFC-A programme on young people in long-term care reunification with the birth family was the aim in only a handful of cases. For the majority, reunification with their families was either not possible or was not considered to be in their best interests. The family work provided by the team focused principally on improving the quality of contact with birth families and onpreparing alternative follow-on carers to look after the young people once they left the MTFC programme.

Among those young people who did not enter MTFC placements and who were instead placed in the usual alternative placements (TAU), the majority (61 per cent) were placed in residential care and most others (31 per cent) were in foster care. A very high proportion of placements in residential care were reported by social workers to be using explicit behavior management strategies, although this approach was less common in other forms of foster care. Social worker reports of this kind are certainly impressionistic and indirect (although they have been shown to be useful in other research - see Chapter 9), but are suggestive in terms of the potential quality of intervention in residential care. It is a reasonable assumption however, that the precise strategies used in residential placements are not as detailed or targeted as those used in MTFC.

17.4 Effectiveness of Multi-dimensional Treatment Foster Care

17.4.1 Analysis of primary outcomes

Our pre-specified primary outcome measure was intended to reflect the overall adjustment of the young person in care, integrating social and mental health outcomes using the HoNOSCA/CGAS method described above. We tested the effectiveness of MTFC in relation to this outcome in two different but related ways, a pre-planned between groups analysis and a separate exploration of within sample differences and testing of relevant hypotheses. All analyses were adjusted for baseline variables.

The intention in the original analysis plan had been to undertake the main part of this analysis on a large randomised cohort with confirmatory analysis on a smaller observational cohort. In the event the sample size for the randomised study was too small to have power to detect a plausible effect size and interpretation was made more difficult by the fact that a significant proportion of cases in the RCT sample moved between the two arms of the study during the treatment period; eight from the MTFC arm to the TAU arm and one from TAU arm to MTFC arm. Some movement of this kind had been anticipated in our design and an additional 'complier average causal effect' analysis planned to adjust for it in the final interpretation. However, the eventual small size of the RCT cohort rendered this further analysis inapplicable.

Analysis of the observational cohort was compromised however in a different way, because of the range of systematic differences between the MTFC and comparison group in terms of age and baseline impairment prior to the entry into the study. This lack of balance has been discussed above and related to methods of recruitment into each arm of the study. To adjust for this imbalance the observational sample was trimmed using a 'propensity score' method, a procedure which improves balance between the groups in terms of the measured confounders. It does this at the expense of reducing the effective size of the sample analysed, since only those cases in each arm showing sufficient matching on these propensity scores are included. However, the reduction in bias between groups more than compensates for this reduced sample. There is however at least in theory still the possibility that unobserved confounders may also be present and leading to further unmeasured differences between the groups.

This between-group analysis is described in detail in Chapter 13. For the randomised cohort, young people in the MTFC group had a marginally better outcome for CGAS at T3 than the TAU group (adj. mean diff 1.3 95 per cent c.i. -7.1 to 9.7)), but this was not statistically significant (p=0.75). A similar effect was observed in the observational comparison. (adj. mean diff. 0.95 95% c.i. -2.38 to 4.29 p=0.57). In summary, neither the randomised trial nor the observational study showed evidence that MTFC gave an overall beneficial outcome compared to treatment as usual. There was no overall

effect on the primary outcome (CGAS/HoNOSCA), nor is there evidence that young people attending MTFC did better in school placements or were less delinquent at outcome or went to placements that were less costly. A similar result was found when the total HoNOSCA score at T3 was taken as the outcome variable. Overall it was found to result in no better outcomes than the alternatives being used (and these alternatives include residential care, some of which seemed to be providing broadly similar behaviour management strategies to MTFC).

A secondary between-group analysis showed an interaction between baseline severity and treatment in relation to C-GAS score. MTFC showed improved results over TAU overall for a group of children who were highly impaired on baseline CGAS. In contrast to the control group small numbers of young people receiving MTFC had either a poor outcome starting from low levels of impairment from T1 or had a good outcome starting from a high level of impairment. There are several explanations for this outcome: whilst it could be a real differential effect of MTFC it could just be a chance positive finding (a so-called Type I error) which is more likely to occur as a post-hoc secondary analysis. Alternatively, it could reflect differences in selection or measurement between the two samples of the observed comparisons.

17.4.2 Further analysis

This second analysis (presented in Chapter 14) made a further investigation of the secondary between-group analysis finding described above, which suggested the possibility of a differential effect of MTFC according to an index of baseline severity. This analysis aimed to test the prior hypothesis that, as MTFC is essentially a behavioural intervention which was originally designed for young people with anti-social behaviour, this differential effect might relate to the impact of MTFC on young people with high levels of anti-social and disruptive behaviour.

As the analyses here are not powered within an experimental test, they are prone to interpretative error and threats to any causal inference made need to be considered by the systematic examination (and where possible testing) of alternative explanations for the results found. Its strengths are the ability to address the inherent complexity of individual and context in this kind of study.

Chapter 14 makes this procedure explicit and describes a number of possible explanations for the results. Having considered the alternatives, the most plausible conclusion seems to be that MTFC may have differentially benefited the highly impaired anti-social young people in this cohort. It may have done this because of its adherence to a systematic behavioural approach or because of its ability to contain behaviour through close supervision. Those whose problems did not involve them in anti-social behaviour did not appear to benefit from MTFC and in fact did better if they were placed in alternative placements. This might be because their problems

were unlikely to respond to a relatively short-term placement from which they would have to move, although other possible explanations are discussed in Chapter 14.

Those who had left their MTFC or alternative index placements at follow-up had much worse outcomes than those who were still in them, even after taking account of their initial characteristics. This finding could arise because this group contains an undue proportion of young people who did not settle in their initial index placement. For this reason, we had predicted that the worst outcomes would be found among those who left MTFC within three months because this group would contain a high proportion of those who failed to respond. In practice this group did not do worse than the young people who left later and who in many cases will have appeared to respond to MTFC and to move on from it as successes. These findings suggest that a good response to MTFC may be difficult to maintain after the young person has left.

In keeping with this concern we carried out a number of analyses relevant to the question of whether the gains apparently made by anti-social young people might last after they left. Since a good proportion of the sample had not yet left MTFC at the time of our endpoint, inferences from this analysis could only be tentative, but given this we found that the comparative advantage of MTFC over alternative placements was less among those who were no longer in their MTFC or original TAU placement. Moreover the difference in outcome between those who had left MTFC and those leaving alternative placements was not significant. Evidence from the Oregon studies (albeit on significantly different populations) suggests that MTFC can provide long-term benefits if the young people move on to appropriate placements. However, there may well be a high risk that these gains will be erorded if the next placement is not appropriate.

17.4.3 Education

Education outcomes were considered important indicators of success at the design stage. Both kinds of analysis undertaken are consistent in finding no evidence that the intervention improves engagement in education, either for the whole cohort or sub-groups, and this despite the intensive educational support provided within the MTFC programme. This lack of difference remains if account is taken of whether or not the young people were still settled in their index placements and of whether or not the child had truanted, itself the main predictor of future truancy.

There was a reduction in the use of mainstream education by follow-up and this was partly explained by the increase in age over this year. Among the MTFC group fewer children were in mainstream school at follow-up, mainly due to greater use of special schools (non-boarding). It is possible that these schools were better able to meet the needs of the young people concerned. Engagement between the MTFC team and

schools appeared to be variable and the teams sometimes struggled to get the support they required from the education services, for example in finding new school placements, which may help to explain our rather discouraging findings regarding education. Co-ordinating care placement moves and education provision could also be an issue, as moving placement might involve a move to a new school.

17.4.4 Offending

When accounting for relevant baseline variables there was no statistical difference in involvement in offending over follow-up between those who had been in MTFC and those who had not. There was, however, some evidence of an interaction in that those with previous offences were comparatively less likely to offend if they received MTFC while the reverse was true for those who did not have previous offences.

Qualitative data suggest that some MTFC placements ended due to the young person's offending either because the carers felt unable to contain the child's behaviour or because of the conditions of sentencing (for example, curfews, remanded to care or moved to secure). In other cases, young people committed offences after they left MTFC and moved to new environments in which less supervision was provided, such as semi-independent accommodation. There may be an implication here of a need for a joined up approach across relevant services.

17.4.5 The timing of follow-up

Half of the young people in the MTFC group were still living in their MTFC placements at one-year follow-up, and for these young people outcomes as measured by the CGAS were significantly better than for those who had left these placements. Also, some of those who left their MTFC placements did so shortly before follow-up and it is known from other studies of the care system that placement movement is often unsettling. This too may have affected outcome scores at follow-up. Those who had left naturally included all of those whose placements had disrupted, whereas those who remained in placement at one-year follow-up had clearly settled well. A further follow-up is therefore needed to assess outcomes once all of the sample have left their MTFC placements.

17.5 In what circumstances was MTFC more effective?

Our exploratory analysis suggested that MTFC may work better for young people whose behaviour was broadly defined as anti-social, particularly during the time they were living in their MTFC placements but less so once they left. This finding is consistent with the conclusions of the Cochrane systematic review of MTFC, which

described it as a promising social intervention for children and young people 'who are at risk of a range of adverse outcomes…particularly those with conduct disorders and delinquency' (Macdonald and Turner, 2009 p.38).

Qualitative evidence from interviews with young people and from questionnaires returned by foster carers, MTFC teams and social workers illustrated how MTFC tended to work better where young people were willing to 'buy in' to the highly structured nature of the programme. Some did so with great enthusiasm, some more grudgingly and others not at all. Whether or not the environment to which the young people moved after they left MTFC was one that would reinforce any positive changes made, allow them to dissipate or actively reinforce behavioural problems also appeared to be important.

These conditions could be undermined by difficulties in finding suitable follow-on placements for the young people and by parents undermining the programme's efforts. Such issues are common to foster care in general, as was another important ingredient of more successful cases that emerged from the qualitative evidence, the development of a positive relationship between the young person and foster carer. This appeared to enhance the willingness of some of the more reluctant young people to work with the programme and so facilitate the delivery of the more structured aspects of the model.

Wider research on foster care also indicates that that the ability of foster carers to persist in caring for very challenging children can increase the chance of successful placement. Our qualitative evidence illustrated how foster carers highly valued the intensive support they received and found the depersonalisation of discipline, through the use of the points system and the displacement of overall control onto the team, very helpful. Although we cannot be sure of the precise effects of this support, it may have helped to maintain the positive nature of relationships, as some foster carers suggested.

17.6 Implications

17.6.1 The effect of MTFC

The overall additional benefit of MTFC for the older children and adolescents in care with complex needs compared to TAU, studied using different measures and methods in this evaluation, is small. This is true for all the key outcomes studied including overall adjustment, education outcomes and offending.

What accounts for this, and in particular for the difference between these findings and the more positive findings from the US studies of MTFC? In seeking to explain this difference we should not run the risk of over-emphasising it. Our study, showed

that at follow-up the anti-social young people who had received MTFC were doing consistently better than the anti-social young people who had not. The Swedish study similarly found some benefit for young people with conduct disorder, albeit not on all measures (Westermark, Hansson and Olsson, 2011). The main Oregon studies have also been targeted at those who were delinquent and shown benefits on measures of anti-social behaviour or shown greater benefits in those showing the most problematic behaviours. Thus the evidence converges in suggesting that MTFC can benefit those exhibiting challenging behaviour. The issues are over the extent and persistence of the benefits and the degree to which they apply to those who do not exhibit extensive anti-social behaviour.

We may consider issues of design, origin, context, sample, measures method and adherence. The US studies succeeded in completing moderately large random allocation designs, which allow more power to make the experimental test of treatment effectiveness. In relation to origin, the US studies of MTFC were all undertaken from the centre of origin of the method, extension of treatment effects of intervention effects outside the centre of origin is notoriously difficult and effect sizes tend generally to reduce on replication. The samples studied and context in the Oregon studies is very different to the UK implementation of MTFC. In particular the Oregon studies were mainly done with delinquent rather samples and with younger children in the care system, in a very different service, consent and social context of compared to provision for looked after young people in England. The primary and secondary measures we used reflected the diverse composition of the group and aimed to reflect a variety of different potential benefits. Other studies have used more focused measures, not all of which have shown differences in favour of MTFC. Our global measures by their nature may combine aspects of young people's functioning that benefited with those that did not – our secondary measures tested some of the specific hypothesised benefits.

The remaining issue of fidelity to the MTFC model is of importance given that the results of other multifaceted interventions, such as multi-systemic therapy (MST) have been shown to be dependent on adequate fidelity to the model and to fall off quite rapidly when fidelity falls. As we saw in Chapter 10, information provided by the national implementation team indicates that, despite the considerable efforts made to ensure treatment fidelity, this varied between teams and, within teams, over time. The operation of such programmes at local level is inevitably shaped by the contexts in which they are delivered, including local policy and resource contexts, and by changes in team composition and skills over time. However, it is in precisely these contexts and circumstances that evidence-based programmes will be used and it is therefore essential that their usefulness is tested in such 'real world' settings. This evaluation was designed as a pragmatic trial, that is, one which evaluates a programme's effectiveness in the context of a 'real world' implementation. It is important ot note, therefore, that it assessed the outcomes of MTFC as delivered in an English ' real world' context and not to a theoretically 'pure' model of the

programme as tested by the programme developers under more controlled conditions.

17.6.2 What are the implications for the MTFC intervention in the future?

While we found that no overall additional impact of MTFC on older children and adolescents in the English care system relative to TAU, there is a suggestion in our study that it may be an effective model to manage behavioural disorder. In particular, there is indication that it may work well with young people broadly defined as anti-social, during the time they are in their MTFC foster placements. The cost and small size of the intervention means that at the moment it can only serve a very small minority of those who might benefit from it. In this study those who did not show anti-social behaviour did better in alternative placements. If MTFC is to continue in its present form it seems wisest to focus it on young people who have clearly shown anti-social behaviour.

Evidence that MTFC can influence outcomes while the young people are in it is clearly important. This influence may possibly be largely confined to the period that the young person is in an MTFC placement (although longer follow-up would be needed to confirm this); a conclusion that would certainly be in keeping with other research discussed in Chapter 14. The implication may be that the aim should be to extend placements over a longer period. If this is so, programme costs will have to be reduced. Training young people’s existing foster carers in elements of the MTFC programme, as in the MTFC KEEP initiative currently being implemented in England, would therefore seem a positive way forward for some young people in foster placements. This would have the aim of stabilising an existing placement, preventing the disruption of carer-child relationships, reducing costs, avoiding the problems of finding new placements, and potentially reducing the likelihood that positive effects will wash out.

For young people who cannot be maintained in ordinary foster care, even if this is reinforced in the ways suggested above, the most effective and efficient alternative remains to be determined. Our study indicates that at least some of the young people characterised as 'anti-social' show an overall benefit from MTFC-A over alternatives; which is important evidence in a difficult area of practice. Further research is indicated to determine whether these benefits last and whether they can only be delivered by the full model of MTFC tested in this project or could also be delivered by models which keep some but not all of its features.

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Appendix 1 Attachment Disorder

A1.1 The nature of Attachment Disorder

Child attachment refers to key characteristics of the relationship between child and a specific caregiver that are known to be strongly associated with early caregiving quality, and later social development and mental health. Two forms of developmental disturbance, associated with severe disruption or absence of early attachment relationships, are recognised as clinical disorders in the main international psychiatric classification systems. ICD10 describes two syndromes, 1) 'Disinhibited attachment disorder', characterised by indiscriminate sociability and associated particularly with absence of specific early attachment relationships, for instance in institutional care; 2) 'Inhibited' or 'Reactive' Attachment disorder, typically associated with disrupted attachment, neglect or maltreatment. DSM IV (American Psychiatric Association, 1994) defines one 'Reactive Attachment Disorder' with two subtypes which closely parallel the separate disorders in ICD-10 (World Health Organisation, 1992).

To avoid confusion, we use the term Attachment Disorder (AD) to apply to both syndromes, the term used in this way equates to Reactive Attachment Disorder (RAD) in US usage. The research base regarding AD is scant, particularly in relation to school-age children (Sheperis, Doggett, Hoda*, et al.*, 2003) and is based almost entirely on ex-institutionalized samples (Levy, 1937; Goldfarb, 1945; Wolkind and Rutter, 1973; O'Connor, Rutter and Team., 2000; Zeanah, 2000) despite its presumed existence in other clinical samples. Placement in a foster or adoptive home may be the most common intervention for AD but there is little evidence base on the effectiveness of this.

The use of a measure of AD in the CaPE study had the following rationale and associated hypotheses: There is little rigorous and systematic information about the prevalence of AD in non-institutionalised clinical samples, for instance, young people (typical of those in the care system) who have been subject to early disrupted relationships, neglect and or abuse. The CaPE evaluation allows the opportunity to investigate the prevalence of AD in a typically severe group of young people in the UK care system for the first time.

Hypothesis

Children in the CaPE trial will have high levels of AD compared to other non-care clinical samples and levels of AD will relate to levels of experience abuse and neglect.

There are theoretical reasons for believing that levels of social impairment associated with AD will be associated with high psychopathology and poorer adjustment.

A1.2 Attachment Disorder at T2

DAWBA-RAD data is available for 114 young people at T2. Here we focus on the total CaPE sample unless otherwise specified.

A1.2.1Data reduction

Factor analysis showed four main factors within the instrument (see Table A1.1), together accounting for 48 per cent of the variance:

1. Demanding behaviour (eigenvalue 5.29, 22 per cent of variance).
2. Unpredictable behaviour (eigenvalue 2.9, 12 per cent of variance).
3. Disinhibition (eigenvalue 1.7, 7 per cent of variance).
4. Emotional Avoidance (eigenvalue 1.5, 6 per cent of variance).

In theoretical terms, the first two of these factors relate to ICD 10 inhibited AD and the latter two to disinhibited AD.

Table A1.1 Summary of AD factors and items at T2

Factor	*Item*	*Loading*
Demandingness	Clingingness	.559
	Possessiveness	.735
	Needs to be centre of attention	.476
	Gets on good side of adult in charge	.779
	Desperate for affection from adults	.718
Unpredictability	Eager to please	-.448
	Generally ignores on reunion	.711
	Hard to know if young person will be friendly/unfriendly on reunion	.799
	Hits out when upset	.470
Disinhibition	Hangs onto adults	.477
	Worryingly overfriendly with strangers	.811
	Ask stranger personal questions, nosey	.700
	Likely to wander off in a new place	.748
	Prefer to get comfort from stranger when upset	.528
	Shallow relationships with adults	.437
	Lack of emotional closeness with adults	.719
	Difficulty trusting adults	.732

A1.2.2 Effect of age at assessment

It is known that AD symptoms in institutionalised children modify over-development and it is therefore of interest that this non-institutionalised high risk sample also shows age related effects. Overall total AD and disinhibited factor scores are higher in younger aged children at assessment[116]. There is no effect of gender on AD scores.

A1.2.3Overall level in comparison with the non-care population

Overall AD scores in the CaPE cohort are high. This can be seen by comparison with 39 participants, aged between 11 and 16 (mean age = 13.52, s.d = 1.5), recruited from mainstream high schools and youth groups from the Greater Manchester area matched in social area; none with a history of living in local authority care. AD scores in the CaPE total sample are more widely distributed (range 1-33 compared to 0-11 in controls) and mean scores are significantly greater than that of the controls[117] (Figure A1.1). This group difference remains highly significant after controlling for age and gender in multivariate analysis.

[116] r=.36 for total and r=.34 for inhibited; both are significant at p<0.001.
[117] Mean = 15.9 for CaPE sample, s.d = 7.9 compared to mean = 3.9, s.d. 2.4 for controls; t = -14.2, df = 150, p < .001.

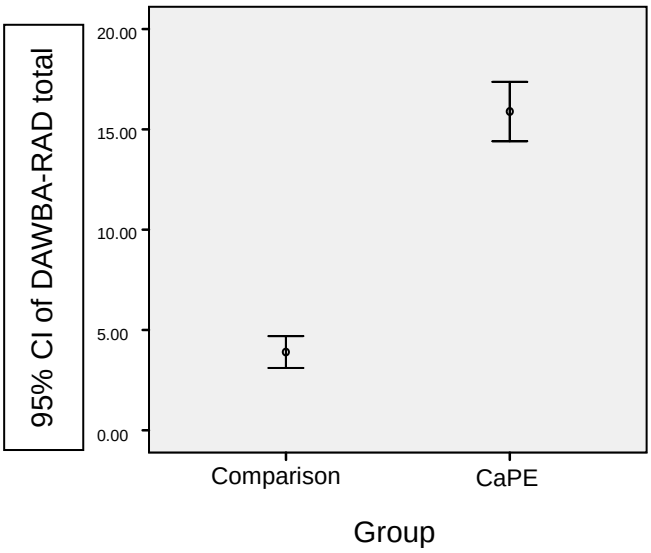
A1.2.4Effect of early adversity

We would expect that AD scores would relate to the extent of early developmental risk factors, and this is found in relation to age taken into care. Children taken into care early in life (whom we can assume to have had the more severely adverse early environment) show greater total scores when controlled for age and gender[118]. They also show greater disinhibition AD scores, but not independently of age at assessment[119].

On the other hand, there is no relationship found between AD scores and cumulative adversity (abuse, maltreatment and neglect). The data shows a trend in this direction – and there is likely a ceiling effect in the analysis here, since most of the children in the sample had suffered considerable adversity.

[118] For age first looked after with total scores B = -1.04, SE = .45, 95% CI = -.87 - .05, p = .027.
[119] For age first looked after with disinhibition scores before controlling for age B = -.067, SE = .025, 95% CI = -.12 - .02, p = .009. After controlling for chronological age B = -.04, SE = .03, 95% CI = -.09 - .- 02, p = .18.

Figure A1.1 Total AD scores in CaPE and normal comparison groups



A1.2.5 Comparison of AD in the total MTFC and TAU groups at T2

We hope for good matching of AD scores across the two cohorts in the study. Since the groups do show age differences (MTFC having lower mean age scores), all analyses of group differences controlled for age and gender. Total RAD scores differ between the groups, but this difference disappears when age is controlled in the analysis[120]. However, the experimental group do have more disinhibition AD behaviours independent of the age difference[121]. There are no between-group differences in the other factors of the DAWBA-RAD. Data was only available at T2 for 19 of the RCT sample and only six controls within the RCT sample. Therefore, it was not possible to make a separate comparison of AD within this group.

A1.3 Attachment Disorder at T3

A1.3.1 Data reduction at T3

At T3 the DAWBA-RAD was completed by carers for 153 young people. In order to establish whether a similar factor structure is observed at T2 and T3 the factor analysis was repeated with the T3 data.

Four factors emerged which explained 52 per cent of the variance in the scores (Table A1.2). These closely resembled the factors extracted at T2 (see Table A1.1):

[120] Before age is controlled B = -3.923, SE = 1.522, 95 per cent CI = 27.1 – 49.4, p = .011, after age is controlled B = -2.790, SE = 1.523, 95 per cent CI = -5.8 - .23, p = .070.
[121] B = -.388, SE = .194, 95 per cent CI = -.77 - .004, p = .048.

- Disinhibited behaviour (eigenvalue 6.32, 26 per cent of variance)
- Unpredictable behaviour (eigenvalue 3.05, 13 per cent of variance)
- Demanding behaviour (eigenvalue 1.73, 7 per cent of variance)
- Emotional Avoidance (eigenvalue 1,31, 6 per cent of variance)

Table A1.2 Summary of AD factors and items at T3

Factor	*Item*	*Loading*
Disinhibited	Gets on the good side of adult in charge	.478
	Desperate for affection from adults	.451
	Worryingly overfriendly with strangers	.806
	Asks strangers personal questions	.751
	Prefers to get comfort from a stranger	.708
	Likely to wander off in a new place	.666
	Forms shallow relationships with adults	.425
Unpredictability	Generally bad tempered on reunion	.826
	Generally ignores on reunion	.809
	Hard to know if young person will be friendly/unfriendly on reunion	.819
Demanding	Avoids eye contact	.497
	Clinginess	.560
	Hangs on to adults	.827
	Possessiveness	.740
	Needs to be centre of attention	.602
	Desperate for affection from adults	.571
Avoidance	Appears wary or watchful as if in danger	.484
	Avoids emotional closeness	.780
	Difficulty trusting adults	.761
	Finds it difficult to accept help	.514
	Avoids eye contact	.534

A1.3.2 Stability of AD between T2 and T3

Data on AD is available for 88 participants at both T2 and T3. There is considerable variability in the length of time between assessment of AD at these time points with a range of four to 21 months and a mean of 10 months. An AD change score was calculated by subtracting the T2 total AD score from the T3 total AD score. The length of time between T2 and T3 did not have a significant association with change in AD behaviour even after controlling for age and gender[122].

Within the whole CaPE sample the change in AD ranges from a reduction of 21 points to an increase of 21 points indicating that whilst some young people displayed a lot less AD behaviour at T3, others displayed equally higher levels at T3. The mean

[122] B = -.076, SE = .345, 95% CI = -.763 - .610, p = *ns.*

total change is very low at .75 indicating that the majority of young people show some degree of stability in AD behaviour. However, the standard deviation of this mean is large at 8.27 suggesting a substantial variation in change scores. The interpretation of these findings is further complicated by the possibility of different respondents at T2 and T3 assessment.

A1.3.3 Association of AD with adjustment at T3

One of the aims of the inclusion of the DAWBA-RAD measure was to investigate the extent to which AD is associated with poor adjustment and may therefore indicate a particularly complex clinical group

AD and psychopathology

First, associations with the data from the CBCL at T3 (see chapter 3) were tested for the factor scores obtained from the T3 factor analysis of the DAWBA-RAD data and the total score. It should be noted that there may be an effect of common responder bias in the association between the DAWBA-RAD scores and CBCL since both instruments were completed by the carer. Nevertheless, there were several strongly significant associations between DAWBA-RAD factors and total scores with CBCL scales. All analysis controlled for the effects of age and gender.

Total AD scores are associated with significantly higher scores on all scales of the CBCL including both internalising and externalising forms of psychopathology and PTSD (see Table A2.1 in Appendix 2).

Table A1.3 Association between CBCL scales and total AD scores at T3 (n=135)

CBCL scale	*B*	*SE*	*95% CI*		*Sig.*
			Lower	Upper	
Anxious/depressed	.294	.041	.169	.330	.000
Withdrawn/depressed	.170	.030	.111	.228	.000
Somatic	.099	.031	.037	.161	.002
Social	.307	.033	.241	.373	.000
Attention	.312	.039	.235	.388	.000
Thought	.261	.034	.194	.328	.000
Rule breaking	.382	.062	.260	.504	.000
Aggressive	.652	.060	.533	.770	.000
PTSD	.407	.043	.321	.493	.000
Internalising total	.518	.079	.361	.675	.000
Externalising total	1.034	.105	.827	1.241	.000

Disinhibited scores are associated with PTSD, total externalising scores, total internalising scores, aggressive behaviour, rule breaking behaviour, attention problems, thought problems and somatic problems. There is no association with anxiety or withdrawal and depression (Table A2.2 in Appendix 2). Demanding AD scores are associated with anxious depressed, social problems, attention problems, thought problems, aggressive behaviour, PTSD and internalising total scores (Table A2.3 in Appendix 2).

Table A1.4 Association between CBCL scales and disinhibited AD scores at T3 (n=135)

CBCL Scale	*B*	*SE*	*95% CI*		*Sig.*
			Lower	Upper	
Somatic	.779	.260	.226	1.293	.003
Social	1.662	.321	1.027	2.296	.000
Attention	1.467	.368	.739	2.195	.000
Thought	1.455	.312	.838	2.072	.000
Rule breaking	1.838	.557	.736	2.940	.001
Aggressive	2.381	.647	1.100	3.661	.000
PTSD	1.321	.450	.430	2.211	.004
Internalising total	1.568	.743	.097	3.039	.037
Externalising total	4.219	1.076	2.091	6.347	.000

Table A1.5 Association between CBCL scales and unpredictable AD scores at T3 (n=135)

CBCL scale	*B*	*SE*	*95% CI*		*Sig.*
			Lower	Upper	
Anxious/depressed	.964	.366	.239	1.688	.010
Withdrawn/depressed	.875	.258	.364	1.386	.001
Attention	.833	.376	.089	1.577	.029
Thought	.934	.321	.299	1.568	.004
Rule breaking	1.235	.560	.128	2.342	.029
Aggressive	2.282	.638	1.020	3.544	.000
PTSD	1.461	.439	.593	2.329	.001
Internalising total	2.305	.715	.890	3.720	.002
Externalising total	3.517	1.075	1.391	5.643	.001

Unpredictability scores are associated with anxious depressed, withdrawn depressed, attention problems, thought problems, rule breaking, aggressive behaviour, PTSD, internalising total and externalising total scores (Table A2.4 in Appendix 2). Avoidant scores are associated with anxious depressed, withdrawn depressed, attention problems, thought problems, rule breaking, aggressive behaviour, PTSD, total internalising and total externalising scores (Table A2.5 in Appendix 2).

Table A1.6 Association between CBCL scales and demanding AD scores at T3 (n=135)

CBCL scale	*B*	*SE*	*95% CI*		*Sig.*
			Lower	Upper	
Anxious/depressed	1.250	.349	.559	1.940	.000
Social	1.430	.313	.811	2.049	.000
Attention	1.073	.361	.359	1.757	.004
Thought	.907	.312	.289	1.525	.004
Aggressive	1.799	.632	.529	3.028	.006
PTSD	1.630	.421	.797	2.463	.000
Internalising total	2.085	.700	.701	3.470	.003

Table A1.7 Association between CBCL scales and avoidant AD scores at T3 (n=135)

CBCL Scale	*B*	*SE*	*95% CI*		*Sig.*
			Lower	Upper	
Anxious/depressed	1.153	.373	.415	1.891	.002
Withdrawn/depressed	1.184	.257	.675	1.693	.000
Attention	1.341	.376	.596	2.085	.001
Thought	.892	.331	.236	1.547	.008
Rule breaking	2.188	.554	1.092	3.284	.000
Aggressive	1.533	.674	.199	2.866	.025
PTSD	1.598	.448	.711	2.485	.001
Internalising total	2.271	.738	.811	3.731	.003
Externalising total	3.721	1.103	1.540	5.902	.001

In summary, AD is associated with multiple forms of psychopathology. Inhibited forms of AD, as represented by the unpredictability and avoidant factors of the DAWBA-RAD, are more strongly associated with internalising forms of psychopathology than disinhibited forms of AD. Both forms are strongly associated with externalising psychopathology, symptoms of PTSD and thought problems including 'odd' behaviour, hallucinations and delusional or eccentric beliefs.

A1.3.4 AD and functional impairment

Next, the association between AD scores and T3 C-GAS and HoNOSCA (see Chapter 3) domains was tested. The C-GAS and HoNOSCA scores did include data gathered from the carer including the CBCL, however, other sources of information were used by a researcher to make a triangulated, blind rating of functioning (see Chapter 3). Therefore, there is less chance of common responder bias when considering the association between functional impairment and the AD scores.

Higher total AD scores, disinhibition and avoidant AD scores were all associated with lower C-GAS scores, indicating that more evidence of AD is associated with greater functional impairment[123]. Unpredictability scores were not associated with C-GAS scores.

Analysis of AD with the individual HoNOSCA domains shows that there are significant associations with specific aspects of functioning. Higher total AD scores are associated with more problems in multiple domains of functioning.

[123] All analysis controls for chronological age and gender. For the association between total AD scores and C-GAS b = -.580, SE = .100, 95% CI = -.778 - -.382, p = .000. For disinhibited AD and C-GAS b = -2.247, SE = .864, 95% CI = -3.955 - -.539, p = .010. For avoidant scores and C-GAS b = -3.406, SE = .843, 95% CI = -5.073 - -1.740, p = .000.

including anti-social behaviour, overactivity, self-harm, drug and alcohol misuse, scholastic and language skills, emotional symptoms, peer relationships, self-care and independence, family life and relationships and poor school attendance (Table A2.6 in Appendix 2).

Higher disinhibited scores are associated with more problems with self-care and independence, peer relationships and overactivity (Table A2.7 in Appendix 2). Higher demanding AD scores are associated with more evidence of emotional symptoms, physical health problems, self-harm and overactivity (Table A2.8 in Appendix 2).

Avoidant AD scores are associated with more problems with anti-social behaviour, overactivity, drug and alcohol misuse, scholastic and language skills, emotional symptoms and family life and relationships (see Table A2.9 in Appendix 2). Unpredictability scores are not associated with any of the HoNOSCA subscales.

Table A1.8 Association between HoNOSCA domain scores and total AD scores at T3 (n=143–150)

HoNOSCA scale	*B*	*SE*	*95% CI*		*Sig.*
			Lower	Upper	
Anti-social	.053	.010	.034	.072	.000
Overactivity	.058	.010	.037	.078	.000
Self-harm	.022	.011	.001	.045	.045
Drug and alcohol	.028	.010	.009	.048	.005
Scholastic	.030	.011	.008	.052	.007
Emotional	.047	.009	.030	.065	.000
Peer	.038	.010	.019	.057	.000
Self-care	.040	.010	.020	.059	.000
Family life	.028	.011	.006	.049	.011
School attendance	.047	.018	.011	.082	.010

Table A1.9 Association between HoNOSCA domain scores and disinhibited AD scores at T3 (n=143–150)

HoNOSCA scale	*B*	*SE*	*95% CI*		*Sig.*
			Lower	Upper	
Overactivity	.175	.087	.003	.346	.046
Peer	.275	.078	.121	.429	.001
Self care	.244	.082	.082	.406	.003

Table A1.10 Association between HoNOSCA domain scores and demanding AD scores at T3 (n=143–150)

HoNOSCA scale	*B*	*SE*	*95% CI*		*Sig.*
			Lower	Upper	
Overactivity	.281	.087	.110	.453	.001
Self harm	.317	.084	.150	.483	.000
Physical	.118	.056	.007	.230	.038
Emotional	.252	.076	.103	.402	.001

Table A1.11 Association between HoNOSCA domain scores and avoidant AD scores at T3 (n=143–150)

HoNOSCA scale	*B*	*SE*	*95% CI*		*Sig.*
			Lower	Upper	
Anti-social	.283	.081	.122	.444	.001
Overactivity	.223	.090	.044	.401	.015
Drug and alcohol	.286	.079	.130	.442	.000
Scholastic	.195	.090	.017	.373	032
Physical	.118	.056	.007	.230	.038
Emotional	.252	.076	.103	.402	.001
Family life	.207	.085	.039	.374	.000

AD is associated with impaired functioning in several aspects of life. Interestingly, unpredictability is not associated with increased functional impairment as indexed by C-GAS or HoNOSCA scores.

Summary

There is to date no validated measure for Attachment Disorder in the adolescent population and no systematic examination of the prevalence of AD in adolescents in looked after care – a group who have by definition been exposed to significant levels of risk and who would be expected to show disturbed attachment. The CaPE analysis

of attachment disorder presented here therefore represents a very significant addition to the knowledge about disturbed attachment in this vulnerable group.

We have shown that the measure of AD used in this investigation has high face validity. Firstly, it shows a factor structure which supports the current diagnostic classification system in suggesting differentiation between disinhibited and inhibited forms of AD. Secondly, there was an age relationship of responses that would be expected in this group as well as some preliminary evidence of a dose relationship to the extent of experienced early adversity. We show very high levels of AD behaviours in this population compared to non-care controls. Although expected, theoretically, this finding, the first of its kind using a clinical measure of disorder, has important implications for the assessment and management of these young people. It opens up a potential window of understanding into the social impairments that may underlie their poor outcomes.

There was some variability in the extent to which AD was observed to be stable between T2 and T3 assessment. The majority of young people showed very little change, while a minority showed a substantial increase or reduction in overall AD ratings. The interpretation of this data is complicated by the variable length of time between assessment and the possibility of different respondents at T2 and T3.

The association of AD with psychopathology, although overwhelmingly perfuse, showed some specificity: there is a slightly stronger association between inhibited forms of AD and internalising psychopathology. Even after considering the possible influence of common respondent bias, the strength of the association of AD with multiple forms of psychopathology is striking and suggests that AD may represent a risk factor for impaired functioning.

This was supported by the equally strong associations with functional impairment as indexed by the C-GAS and HoNOSCA: independently rated measures based on evidence from multiple informants. Interestingly, the unpredictability factor of the DAWBA-RAD, which contains behaviours associated with inhibited AD, was not associated with increased functional impairment. Contrary to this was the association of emotional avoidance, a factor containing items which are also related to inhibited AD, with increased impairment in several domains of functioning. More work is needed on the characteristics, clinical implications and validity of a differentiation between Inhibited and Disinhibited AD subtypes in adolescent looked after populations.

The experimental and control groups in CaPE are generally well matched on AD scores. An exception is the higher rate of the disinhibited sub-type of AD in the experimental group, independent of age effects. Quite why there is this difference is not immediately apparent.

The use of the DAWBA-RAD measure in the CaPE sample has provided evidence of high levels of AD behaviour in the UK looked after population. It also supports the current diagnostic classification system. Importantly, it signals AD as being strongly associated with multiple forms of psychopathology and functional impairment in several domains of life. These findings all underline the need for more systematic empirical studies of AD in looked after populations.

Appendix 2 C-GAS and HoNOSCA Inter-rater Statistics

Table A2.1 C-GAS and HoNOSCA inter-rater statistics (n=179–211)

Scale	*T1 rating*			*T3 rating*		
	ICC	*95% CI*		*ICC*	*95% CI*	
		Lower	Upper		Lower	Upper
C-GAS	.75	.68	.80	.81	.75	.85
					HoNOSCA scales	
Disruptive and anti-social	.78	.72	.83	.85	.80	.88
Overactivity	.80	.74	.85	.73	.65	.79
Self-harm	.89	.87	.92	.89	.85	.91
Alcohol and substance	.89	.85	.91	.77	.71	.82
Scholastic performance	.64	.55	.72	.62	.53	.71
Physical problems	.78	.73	.83	.66	.57	.73
Non-organic somatic	.79	.73	.84	.75	.68	.81
Hallucinations	.53	.41	.63	.64	.56	.72
Emotional difficulties	.70	.62	.77	.58	.48	.67
Peer relationships	.77	.71	.82	.67	.59	.74
Self-care	.73	.65	.79	.75	.67	.81
Family life	.58	.48	.67	.51	.39	.61
School attendance	.88	.85	.91	.68	.60	.75

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