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THE EFFECTS OF PARTICIPATION IN A SOCIO-PSYCHOEDUCATIONAL RESOURCE CENTRE PROGRAMME ON THE SCHOOL BEHAVIOUR OF PRIMARY SCHOOL BOYS WITH BEHAVIOURAL AND EMOTIONAL PROBLEMS.

BY

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A thesis submitted in partial fulfillment of the requirements for the award of

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USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.

ABSTRACT

This study examined the relationship between child and family factors, treatment approaches, and behavioural outcomes in a socio-psychoeducational resource centre for children with behavioural and emotional problems.

Twenty four boys aged between five and twelve years on entrance to the centre were rated on "A Children's Behaviour Questionnaire for Completion by Teachers - Child Scale B " (Rutter, 1967). Data was also collected on the following variables: reading achievement, intelligence, problem severity, problem type, family disturbance, family involvement, and child living situation. On the basis of the type of problem the boys presented with they were selected for an additional therapy programme. Baseline data was collected from the referring school, on entrance to the programme, at six monthly intervals whilst enrolled in the centre, on exit from the programme, and at follow-up three to four years after exit from the programme.

Descriptive statistics for the child and family variables at entrance, exit, and follow-up are reported. Data on the main outcome variable was analysed using repeated measures ANOVA and multiple regression analyses.

Results show that the S.P.E.R. Centre had behavioural improvement similar to other published studies. The older, more intelligent boys, and those selected for regular individual therapy sessions, tended to fare best.

DECLARATION

I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher education; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

Signature.
Date...9/6/92...........

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I want to give special thanks to all the staff I worked with whilst collecting the data and to the boys and their families who participated in the programme. Dr. Noel Howieson deserves a special mention for the generous time she gave in consultation and supervision of the therapy treatment programmes. Her enthusiasm and dedication to professionalism was the inspiration for this research.

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Chapter 1

Introduction

This study examines the relationship between child and family factors, treatment approaches, and behavioural outcomes in a socio-psychoeducational resource centre programme for children with emotional and behavioural problems. This chapter begins by discussing the background to the study. It describes in detail the centre that is the focus for this study, presents several case studies to illustrate the types of behavioural and emotional problems of the referred children, and outlines the programmes used to treat them. It concludes by describing the major features of the present study and discussing its significance.

Background to the study

There is, at present an increasing demand for accountability in education. At the same time one pressing community pre-occupation is the perceived growth of juvenile crime. A combined result of these two factors is the desire for the early identification of potential young offenders and an evaluative scrutiny of the programmes which have been designed to assist "at risk" children within the education system. Robins (1986) closes an extensive study of conduct disorder by concluding:

> "...that the effects of conduct problems in childhood can last a lifetime. In all, the findings of this

study only serve to underscore and extend the findings of my own and others' previous research that finding ways of interrupting the development of conduct disorder in children.....is a vital concern for our society (p. 249)."

There is clear research evidence that aggressive, antisocial behaviours in childhood may lead on to juvenile delinquency and to adult offending as well unless effective therapeutic intervention occurs (Cross & Slee, 1988; Farrington, 1987, 1991; Farrington, Loeber, & Van Kammen, 1990; Loeber, 1982; Rutter, 1985; Robins, 1986; Robins, Tipp, & Przybeck, 1991). Recently hyperactivity-impulsivity-attention deficit disorder in young boys has also been found to be predictive of early criminal convictions (Farrington, Loeber, & Van Kammen, 1990). Of particular interest to educators is that early school misbehaviour and failure has been linked to later emotional and behavioural problems. Misconduct at school from entry onward, bonding to school, and the nature of the school environment have been specifically identified as predictors of later delinquency (Farrington, Loeber, & Elliot, et al., 1990). It is thus topical to examine more closely the facilities that exist to serve the population of children who are not coping socially, behaviourally, or emotionally in the regular school system and to evaluate the outcomes of those programmes.

The number and variety of programmes written for teachers of disturbed youth attest to the belief that potential delinquency and withdrawn behaviours can be

remediated at the point of detection. Some programmes for children with emotional and behavioural disorders have actually been in place for considerable time and have never been properly evaluated. If they are successful then, perhaps, there should be more of them. If they are not, then new directions need to be considered.

In Western Australia in 1991 the issue of what to do about troubled youth has become an emotive one attracting considerable media interest. In such an atmosphere it becomes tempting for policy makers to take on board any possible solutions offered without considered evaluation of their suitability and effectiveness.

Existing facilities within the Ministry of Education in Western Australia include a school psychological consultative service and also four Socio-psychoeducational Resource Centres (S.P.E.R. Centres). These centres developed originally along the lines of the psychoeducational day school popular in America in the 1960's and 70's as an environment for the treatment of emotionally disturbed children and adolescents. The unique aspect of this treatment approach was the provision of special services in a setting separate from the regular school system. The setting serves as a treatment environment for children evidencing a wide range of behavioural disorders including autism, schizophrenia, aggressiveness, and withdrawal. Programmes within these settings reflect all major theoretical orientations, but they are primarily concerned with psychodynamic, behavioural, and ecological approaches. Services include a

multidisciplinary treatment approach utilising specialised educational techniques and psychological services to the children and their families.

The Western Australian centres have evolved slightly differently. For example, autistic and schizophrenic children are usually served by the Mental Health Department and the S.P.E.R. Centres are located in the grounds of a regular school. One of these centres will provide the focus for this research.

The S.P.E.R. Centre

The centre which is the setting for this research study is located in a north-eastern suburb of Perth, Western Australia. It is one of four such centres funded completely by the Ministry of Education. Staff are selected for their suitability and seconded to the centre. Although situated in the grounds of a host primary school it functions autonomously, being responsible to head office personnel rather than the host school principal or local superintendents.

Population.

The children served by this centre range in age from 5 to 12 years. They are mostly of average intelligence but usually underachieving at school. Most of the children are referred for the following behavioural disturbances: authority conflicts, aggressiveness, extreme withdrawal,

severe attention deficit, inability to relate to others, emotional lability, chronic truancy, adjustment reactions of childhood, bizarre speech and gesture, or combinations of these problems. They are considered to be unmanageable in the regular classroom. Their behaviour may be so distractible that the teaching of the class is interfered with to an extreme degree. Alternatively, they may be admitted because their behaviour is such that it is impossible for them to learn in the regular classroom situation.

All referred children undergo an extensive evaluation which includes intellectual and psychological assessment, in-class observation, and child and family interviews. Students who are admitted to the centres have to be considered 'amenable' with behaviour considered modifiable through the efforts of the staff within the centres in a relatively short time span (1-2 years).

Entrance to the programme is based on suitability, assessed by the centre psychologist, order of referral and balance of children already in the programme. The programme is discussed at several stages with the child's parents who must be in agreement about the placement and co-operative if the child is to be accepted into the centre.

Programme.

The programme operates on a regular 40 week school year, five days per week, six hours per day. A maximum of

16 children are enrolled in the centre at any one time. Two classrooms, lower primary and upper primary are run by a teacher with an aide in each.

The psychologist-in-charge has overall responsibility for the running of the centre, planning and implementation of psychological and educational programmes, and liaison with schools and relevant agencies. As well as treating individuals the psychologist must provide to staff psychological understanding which is relevant to the therapeutic milieu of the centre. An example of how this understanding enters the teaching programme may be seen in the following case study.

Selwyn (age 10-9)

Selwyn presented as an "empty" child whose self appeared to be in need of major repair. He had had a poor start to life with a father whose parenting was random and critical and his mother emotionally unavailable for Selwyn until he was almost four years old. Therapy was held regularly for twelve months, beginning a few months after entering the programme and fading out as Selwyn was preparing for High School.

Selwyn initially looked for approval constantly, but soon demonstrated an ability to create an atmosphere with the equipment and to direct creative play. The therapist took a role of putting dialogue to his experiences, labelling any shades of emotion that were presented and letting Selwyn know he was creating fun. At times another child was invited to join in and Selwyn's gentle creative play allowed for enjoyment by both boys. Selwyn also worked through issues around the violence he had experienced and he learned how to create safety for himself. He would constantly rebuild a home, only to have

it knocked down by "bad men." The house became more and more elaborate beginning as a bike shed, to motorbike shed, to garage to a magical and beautiful mansion, to army base protected by rocket launchers and police. At other times he worked on abandonment issues through animals, and on his conflicts with his father and not being good enough for him. He also recognised that there was a good and healthy part of himself, that he wasn't all damaged, and he could fight back. He used many symbols to work on the different parts of himself and to find ways of survival and a geographical place to fit his soul. He did not appear to be "empty" as it first appeared, rather he had just not "flowered" and when he did within the sessions he was animated, assertive, caring, creative, and fun to be with.

From this, staff were instructed to unconditionally accept anything Selwyn produced in class or created in play. They encouraged him to find his own interests as separate from those of other children. They instigated many non-competitive games and encouraged Selwyn's efforts. Time-out produced severe terror in Selwyn, perhaps a result of his earlier abandonment. Staff instead were instructed to hold and rock him gently when he was out of control. An attempt was made to set up a "safe place" at High School for Selwyn to turn to when stressed. At exit it was recognised that his emotional health was still fragile and further psychological work would be needed for Selwyn to survive the turbulent adolescent years.

Teachers are directly responsible for academic instruction, behaviour management, and implementation of individual educational and management programmes.

The host school's availability ensures the children participate in general school activities (e.g. assemblies, physical education, sports days) and are not totally

isolated from regular school life whilst in the programme. It also provides an avenue for the children to progressively integrate back into mainstream education. In return the expertise and resources in the centre are made available to the host school.

The programme has two main treatment components:

(i) Behavioural management/ supportive milieu.

Intermittent tangible positive reinforcement is used to reinforce appropriate behaviours and, as well, a token economy system runs throughout the centre. Strict limits are set both in the classroom and playground. Those who transgress these are immediately stood out of the situation for several minutes and if necessary isolated until they are able to re-enter the group and behave appropriately. Behavioural demands increasingly approximate those of a regular classroom. The environment is kept as much as possible like that of a warm, caring classroom. Staff talk with children about their behaviours and the consequences of their actions on others and model appropriate interactions. Small group discussions on feeling issues are timetabled as necessary. Regular weekly outings are organised to provide children with additional social and environmental experiences. Additionally, the children are taken on a five day residential camp several times a year.

(ii) Behavioural management/ supportive milieu plus regular weekly therapy sessions.

For some children, usually those evidencing some inner turbulence, regular therapy sessions form part of

their psychological programme. When they appear to be benefiting from the therapeutic environment of the school and the teaching work is on a firm basis therapy is seen as an opportunity for them to express this inner disturbance. The therapist is able to build on a foundation of the relationship provided by the teachers. These sessions are most often conducted as play therapy sessions where they are designed to help the child come to terms with or gain insight into his situation through fantasy and symbolism in a non-threatening therapy milieu. For some of the more verbal children participation in regular verbal therapy sessions enable them to come to terms with their situation. The overall programme for each of the boys in this study is summarised in Appendix A. Several cases are presented here to illustrate the different kinds of therapy that occur in the centre.

1. Tony

Tony aged 8 and a half years, was unpredictably explosive; verbally and physically abusing himself, his peers, teachers, and objects. He was also hypersensitive, would cry easily and appeared anxious and depressed. Mr and Mrs T attended the initial intake interview. Mr T initiated most conversation, speaking quickly, emotionally and at times aggressively. His dialogue was punctuated with colloquial swear words. He was concerned about Tony's behaviour at school, however saw total responsibility for this as being with the school, focusing repeatedly on the school's inadequacies. Mr T insisted that at home Tony was quite manageable. Mrs T remained impassive and expressionless throughout the interview, contributing when asked in a slow, unruffled manner. Both parents expressed

how their own upbringings were disturbing, containing much violence, alcoholism, emotional instability, and neglect.

Tony was conceived in order to sustain Mrs T's own emotional needs. He was born into an atmosphere of terror and violence toward his mother, older sister, and self by his father and paternal grandmother. The pregnancy and birth were both complicated. His mother was prescribed Serapax throughout the latter half of the pregnancy. Tony was eventually born breech and eight weeks premature. Tony was bottle-fed by formulae, although his mother was desperate to breastfeed him and held him "almost all day long". His mother was expending considerable energy trying to physically protect herself and her children and was dependent on Serapax. She was eventually weaned off Serapax almost four years later. Tony's natural father was eventually hospitalised in a psychiatric centre and the family given police protection. Both children suffered from continual nightmares and bedwetting.

Tony was four years old when Mrs T. met her current husband. Mr T. described himself as always a rebel, hating authority, and proud of his well known and vicious temper. He left the navy after seven years after a clash with authority. The same type of clash saw him leave several other places of employment.

At intake Tony presented as a quiet, withdrawn, and emotionally expressionless boy. Although a cold day Tony was dressed in very brief, tight shorts and a T-shirt. His physical appearance was immature. He was also overweight, wore very thick glasses, had a crew cut hair style and large ears. His facial expression was tense and his manner complaining and whining.

Tony's developmental history and mixed behavioural patterns suggested a deeply disturbed, fragmented child, who would possibly respond best to psychotherapy several times a week. Due to limited resources both within the centre and the community this was not possible. It was decided that the intensive programme offered by the centre coupled with therapy at least once per week was the best programme available for Tony and his family.

Therapy was conducted with Tony at least weekly for two and a half school years. Tony was at ease in the situation from the very first session. He confidently worked on numerous issues and the sessions were very intense. Tony required the therapists total attention and constant interaction. The sessions became extremely important to Tony and he would plan ahead for the next session and return to previous ones as he needed. It became obvious that Tony worked well in this medium and that he would use as many sessions in a week as he was offered. There were occasions when Tony appeared to be fragmenting and extra sessions were managed. Tony was aware of his uncontrollable feelings using a theme of volcano's, violence, and carnage to work on them. He also knew they were inside both his natural father and his stepfather and was trying to come to terms with this. He began to use the therapist "to put his house (self) in order". He allowed her to meet the frightened little boy inside him, and asked her for nurturance for his vulnerable self, via small animals and babies.

As these aspects of therapy were worked on, combined with the classroom management programme Tony's behaviour improved dramatically and his overall demeanour became more relaxed and soft. Therapy continued and Tony began to tell his own story of terror and precipices and showed how no-one was available to rock and soothe him enough. He later brought in obvious Oedipal issues to work on, moving from these to relationship issues. Tony seemed starved for someone to understand him, for sharing, and companionship.

The last twelve sessions were directed around the issue of Tony leaving the centre. He had worked through many issues and some parts of his personality were certainly functioning in a more healthy way. To integrate Tony's personality further, considerably more long term and intensive therapy would be required.

2. Laurie

Laurie was almost ten years old when he was brought to the centre by his mother and maternal grandmother. He had been withdrawn from school by his parents to be taught at home. At school he had been seen as withdrawn, depressed, and a social isolate. He was also underachieving and had specific learning problems. In class he was easily distracted and constantly seeking attention in trivial ways.

Laurie was an only child, and his conception was not planned. His father had children from a previous marriage and was less than enthusiastic and his mother described herself as "not particularly maternal, but I thought I'd prove I could do it (have a child)." Laurie was bottle fed as his mother didn't like breast feeding. At 3 months he was left with godparents whilst his mother returned to her husband and to her work as a barmaid. When Laurie rejoined his family it was to some calm but also to considerable arguing and paternal absences due to his father's work as a crayfisherman.

At 2 years 6 months Laurie and his mother returned to live in WA with his maternal grandparents. At this point Laurie's mother thought he was fairly normal, other than he preferred to play alone. Arguments began with the maternal grandparents about management of Laurie. He was left with them whilst his mother went to India for a six month holiday. In this time they coached Laurie in school work in order for him to be ready for starting school. Working on spelling and mathematics was then used as punishment for misdemeanours. His mother returned from holidays but was soon in a rut and depressed at being a single parent.

When Laurie was six his mother met her current husband, a Vietnam veteran with his own grown up family and who was not keen on having another child "hanging around my neck". The family have remained together in spite of considerable tension to do with blended family

dynamics, the influence of the extended family, and employment stresses.

Laurie impressed initially as a quietly spoken co-operative boy. When interest was shown in what he had to say he brightened visibly and spoke energetically sometimes losing the flow of his conversation but not willing/able to stop. He was very articulate, talking in a most mature manner about his situation both at home and at school.

Laurie's verbal ability, his imagination, his awareness of feelings, and his willingness to work on his inner life was evident from the beginning of his entry to the programme. He appeared well suited to working in therapy.

Initially play equipment was used with the therapist listening, understanding, and empathising. Laurie worked on issues such as his learning disability. For Laurie a big question was "Am I dumb?" His verbosity was perhaps to compensate for this feeling. It became important for the therapist to play down his lack of school competence and to validate his resourcefulness, his ideas, and his understanding. A considerable portion of Laurie's therapy centred around his idealisation of "war". His stepfather, and his grandfather have both been in "wars", and his family life is often in reality "war". Laurie used war and warriors to work through issues of "maleness". Wars also served to express his rage about what he doesn't get for himself. Laurie began by "blowing up the planet", moved to discussions of world leaders blowing up the world and finally to "If this family is blown up what will happen to me? What sort of people get killed? Are they the dumb ones?" By the end of therapy Laurie was not going to blow up anything. He buried the "wars". He chose to learn to live on the planet taking what he could from his bad experiences.

Laurie's deep capacity for caring became evident in his discussions around his pet mice. Early in the programme Laurie began bringing a pet mouse to school and continued to have at least one pet mouse, often more, for

almost two years. They assumed a huge significance. Outwardly they gave him an "in" with his peers, however he seemed to identify with their smallness and vulnerability. Laurie began to work on many aspects of his inner world through his mice. He cared for them as he wished to be cared for. He came to terms with the results of caring, such as when he accidentally hurt them, and when they were a nuisance. He became frantic when he was forcibly separated from them and recognised how connected he had become to them and how great his capacity to care. They would die and he grieved. They became out of hand and couldn't be controlled. He planned how he could care for them and breed them when he had his own place. He thought about and planned for life after school. Through the mice Laurie began to separate his own values from those of his family and to make choices about them.

In his therapy Laurie identified with much of the animal world. Animals calmed and reassured him and provided a vehicle for Laurie to work out how he would be in the world e.g. not like the spiny echidna who grows spikes to protect it, but suffers inwardly.

Laurie learned some skills of both interactive talk and play through these sessions. The last sessions were all conversational in a quite adult fashion about friendships and letting go past chapters in his life.

3. Alan

Alan, nearly six years old, was referred for impulsive, disorderly, aggressive, and extremely fearful behaviours. He was adopted by his parents at six weeks. His arrival created considerable confusion and anxiety since they had been expecting a toddler. He was also ill at the time and his doctor was reluctant to allow him to make the transition from the foster home. Mrs A described that first year as "awful but we managed. It was the time after this that was more unbelievable." Alan was extremely boisterous and constantly in trouble. He was not welcome

in any play groups. Although he appeared to be toilet trained at 22 months, after being clean and dry for a few weeks he began to wet and soil to "get attention" and would also put his fingers down his throat to make himself vomit. He still urinates inappropriately for attention. Mrs A. was driving him huge distances to find play groups where he was accepted. When he was asked to leave kindergarten for four year olds and was extremely violent towards her Mrs A. began seeking professional help. An E.E.G. indicated some immature brain cells but generally all assessments proved inconclusive. Mrs A. felt no-one ever believed what was happening until about twelve months later when they began seeing a private psychiatrist regularly. When Alan was five years two months he was hospitalised for ten days after continually hitting his mother on the head with a shoe, becoming uncontrollable, and throwing objects. Mrs A. had always been unable to respond appropriately to his violence, becoming very frightened, going clammy, hyperventilating, and feeling faint.

Mr and Mrs A. emigrated from England to marry. They both describe disturbed backgrounds. Mr A's. father was diagnosed paranoid schizophrenic. Mrs A. described her mother as a "piranha fish" and hypercritical and her father as "weak and henpecked."
They agree that the first year of their marriage was happy. They were on an equal footing, sharing household chores, and both bringing in income. The relationship deteriorated due to the difficulties in adjusting to a baby and expectations about their roles in a family.
The family dynamics never recovered and rather than mother, father, and child it tended to be one of two mates and a women, both males alternately putting down Mrs A. or competing for her affection.

Alan presented as quiet and anxious, he did not make eye contact appropriately, he stuttered slightly, and seemed to be drawing himself up to be bigger than he was. He did not offer much information but seemed to be looking everywhere about him.

Alan's unusual and extreme behaviours combined with his developmental history indicated an emotionally disturbed child. He was a highly anxious, damaged child who was brought into a highly anxious family. It seemed that there was a definite mismatch between the baby's temperament and his adopted parents and this in itself could cause major difficulty (Thomas & Chess, 1985). Given this scenario and Alan's young age "play therapy" seemed an ideal medium to work out his conflicts. Therapy was held regularly for three school years even though Alan officially exited the centre well before this.

Alan's first session was conducted in almost reverent silence. This was occasionally broken by Alan asking permission to use certain equipment. Towards the end of the session he became quite animated setting up a domino effect of crazy accidents. Alan continued the theme begun in this session throughout the course of therapy. He used a dare-devil motorbike rider to show the therapist how if you are competent and do things properly and well you get through life. When people come to grief it's because they are careless. Through this motorbike rider Alan worked on many issues. Very early in therapy he brought in sexual issues, and feelings of inadequacy and vulnerability. He had difficulty distinguishing motherly love from sexual love and often worked in a violent and aggressive manner around this issue. Oedipal issues were addressed in therapy and in separate counselling sessions with his parents. Sexual issues continued to dominate therapy and were acted out in eccentric and aggressive behaviours outside the sessions, especially at home.

Alan used several motorbike riders to work on his "good" and "bad" sides and gradually came to integrate these.

Whilst in the centre and prior to therapy beginning, Alan formed an extremely close attachment to his male teacher. This teacher became his main caretaker and confidante. There was no role confusion here; Alan was a cared for little boy and clearly treated so. There were a number of occasions at school, on camps, and even at home

when this caretaker was required to calm and soothe very real terror in Alan. The terror emanated from both psychological causes such as despair at perceived threats of abandonment and from physical causes such as overreaction to small stimuli e.g. sand in his eyes.

Alan's eventual exit from the programme was a prolonged affair. He exited to the host school from the centre at the request of his mother who felt a greater change would be too unsettling for him. There was considerable anxiety around the family's separation from the centre. In actuality they managed very well in the host school without much help, however this was partly due to a long integration process whereby most regular school staff understood and could manage Alan sensitively. Alan and his mother would return to the centre staff in times of stress for understanding and support. He still had periods of considerable anxiety, usually to do with his peers not liking him or fears of being sent to the School Principal for a misdemeanour. On these occasions terror would overwhelm him and he might require help with managing this appropriately. These periods occurred more at home than at school, however Mrs A. had gained considerable confidence in managing these sensibly.
Two years later when there was to be major staffing change at the S.P.E.R. Centre this anxiety resurfaced and some further work on alleviating anxieties was necessary.

Programme Goals.

All treatment efforts are geared toward the reintegration of the child into the regular school system. Children judged ready to integrate are placed in the host or local schools for varying lengths of time. Integration is gradually increased at a pace suited to the children's needs until they are able to maintain themselves in the

regular school environment on a full-time basis. The effectiveness of these efforts is monitored through ongoing teacher consultation, regular written progress reports, and weekly staff conferences. Future placement is considered carefully in order that a school setting be found where the children will be able to function more easily than in the one from which they were initially referred.

Staff Issues.

Regular meeting times are scheduled with staff members both for professional development and for dealing with interpersonal conflicts. Usually the psychologist-in-charge is expected to keep alert to any undercurrents and raise them for discussion before they build into problems that might interfere with the work with the children and parents. It is felt to be important that the children and parents see that the adults who work together trust and respect one another.

Status of S.P.E.R. Centres within the Western Australian Ministry of Education

The exhaustive Dettman Report," Discipline in Secondary schools in Western Australia" (Dettman, 1972), marked the turning point in the debate over disturbing behaviour in the Western Australian context. It called for increased provision of psychological and welfare support

services and bears witness to an emerging "psychological" rationale as a way of coping with problem behaviour in schools.

Shortly after the publication of The Discipline Report the four withdrawal centres for primary school age children described above and named Socio-Psychoeducational Resource Centres (S.P.E.R. Centres) were established.

The mode of operating was dependent on the skills and philosophy of the staff employed in each centre. Within a general rationale of treating underlying emotional problems in an educational context, an eclectic approach with combinations of psychotherapy, systems theory, and behaviourism has been employed by the centres. This is in keeping with most recent approaches that advocate the need for flexible and eclectic interventions ranging from highly structured to unstructured and 'therapeutic' environments (McLaughlin, 1987).

As the centres have evolved there have been changes in both their structure, the programmes they offer, in some cases the type of clientele, and in their methods of service delivery.

In 1982, in a joint venture with the Education Department of Western Australia and the Mental Health Services, Western Australia, a clinic school called The "New School" started in Warwick, a suburb of Perth. This school is for children/adolescents aged 11 to 14 years, with severe emotional problems related to school difficulties that result in school attendance being unprofitable or untenable.

In both instances there have been no substantive publications concerning either evaluation or description of these facilities. In the latter case, much data has been collected on the students who have passed through the programme, but as yet little of this has been analysed (Relph, 1984). Research into the S.P.E.R. Centres is also negligible. Only one study has ever been attempted (Robson & Moor, 1985). This was a descriptive study, commissioned by policy makers in what was then the Education Department of Western Australia. It broadly examined several aspects of the functioning of each of the four centres. Classroom observations were taken on 23 children. The data were analysed comparing two groups, those who had recently entered the system and those who had exited. Some matching for age and referral problem occurred. The authors acknowledged severe methodological problems and cautioned that the results of comparisons between the groups should be used merely as discussion points. The study was not published and did not develop beyond an internal summary report. No further evaluation has been attempted.

Personnel in the centres did however respond to suggestions made in this and in a major inquiry into education in Western Australia (Beazely, 1984), by developing a more flexible method of service delivery including outreach work as well as withdrawal of students to centres. In the outreach programmes staff from the centre maintain psychoeducational interventions for children in their regular classroom. They provide extensive consultation for the teachers about effective

teaching strategies for individual problem children in their classes. In the withdrawal centre programmes, the children are provided a therapeutic education in a centre separate from the regular classroom. It is a withdrawal centre that is the focus for this research.

Need For This Study

Although the S.P.E.R. Centres were originally set up as experimental facilities in 1974 there has been only the one study undertaken (Robson and Moor, 1985). They have survived the rigours of various inquiries into, and subsequent restructuring of, education in Western Australia, as well as a specific report into their own effectiveness. One might argue that they must therefore be working and have kept pace with changing philosophies and methods in education. However there has been no real evaluative study to state this definitely or even to highlight aspects of the centres that might be of psychological or educational significance. The staff in the centres are service-oriented with little time or resources allocated for research. This present study will therefore be an important contribution to the knowledge base available to policy makers allocating resources as well as to the client's of the centre who wish to be informed as to the measured effectiveness of the programme to which they commit themselves.

Features of this study

This study examines the behavioural outcomes from a programme offered by the Western Australian S.P.E.R. Centre described in detail above. It aims to investigate child, family, and programme factors associated with success in the centre, using the following predictor variables:

1. The age of the child on entry to the programme.
2. The type of problem with which the child presents.
3. The severity of the child's problem.
4. The nature of any previous services received by the child.
5. The child's measured IQ on referral to the programme.
6. The child's achievement in reading on referral to the programme.
7. The type of home living situation from which the child comes.
8. The level of disturbance in the child's family.
9. The level to which the child's family become involved in the programme.
10. The length of time the child is in the programme.

The main outcome variables will be the scores on the Child Scale B questionnaire (Rutter, 1967) and follow up data from child, parent, and teacher interviews.

The data will be analysed in order to see if the type of child likely to benefit from various components of the programme can be identified and whether the programme as a whole was able to remediate potential delinquent and disturbed behaviour. It will also examine two components of the treatment programme to ascertain if there is any relationship between the type of programme undertaken and behavioural outcome.

The study aims to answer the following research questions:

1. What changes have there been in the behaviour of students from entrance to the S.P.E.R. Centre programme to their exit.

2. To what extent did positive behavioural changes made during the programmes last after exit?

3. Is it possible to identify children who are more likely to benefit from the programme by identifying characteristics that are related to positive programme progress and outcome?

4. What programme components are important for behavioural improvement in the centre.

Importance of the Study

The study will be of importance to those involved in strategic planning for children with emotional disturbance and behaviour disorders. It is a timely research study and will offer practical information on intervention effects. Additionally it will be of particular interest to professionals working with disturbed children in Western Australia since it has implications for the type of programme offered in the centres, the selection criteria, and also follow-up procedures. It will collate data previously unreported, and describe individual cases demonstrating the opportunities created in a unit such as the S.P.E.R. Centre for working with disturbed children in a variety of ways. Importantly the study will provide an empirical base for further research.

Chapter 2
Review of the Literature

This chapter begins with a discussion of the effectiveness of psychological treatment of disturbed children before placing this treatment in a historical and international context. A discussion of the major treatment approaches and a review of the outcome literature regarding psychoeducational day school programmes is then presented. The chapter concludes with a critical evaluation of previous research.

Effectiveness of Psychological Treatment of Emotionally Disturbed Children

The evaluation of the effectiveness of psychological treatment with children has been approached in two ways in the literature: narrative, qualitative reviews and quantitative, meta-analyses of the literature.

Kazdin (1988) examined the narrative reviews and investigations beginning with Levitt's initial review in 1957. He found that there were actually few studies completed. Moreover those which were reported contained so many methodological shortcomings that it was difficult to report confidently on treatment outcomes. More recent reviews have tended to focus on either specific techniques or problem types. However with this approach there remains the problem of only a small number of controlled outcome studies being reported allowing no further informative

conclusions to be reached.

Meta-analytic techniques make it possible to aggregate findings across multiple studies to assess the effects of treatment. Findings have been systematically compared across dimensions such as treatment approach and child and family characteristics (Weisz, Weiss, Alicke, & Klotz, 1987). Casey and Berman (1985) used this technique across 75 studies of children aged 12 years and younger. They found that there was a reliable advantage for treatment over no treatment and that this matched the efficacy of therapy with adults. Their results suggested that studies of behavioural methods demonstrated better outcomes than studies incorporating non behavioural ones. These results were tentative due to the fact that children with different problems tend to receive different types of therapy and different measures of treatment efficacy were used. They found no evidence to suggest that play therapy was reliably better or worse for children than non-play therapy or that individual treatment was any more effective than group treatment. Weisz et al.,(1987) found that behavioural methods yielded significantly superior results to non-behavioural methods, holding up across differences in age level, problem type, and therapist experience, and were not qualified by interactions with any of these factors. However they report a dearth of well controlled non-behavioural studies and note the research difficulties involved when in clinical practice different approaches tend to be used for different problems.

Rutter and Giller (1984) in their review of the

literature concluded that behavioural techniques, whilst useful in modifying the behaviour of delinquents in residential settings, did not prove to be the key to social learning on their return to the community. They also found that psychotherapy was not generally useful with delinquents unless there was motivation for change and deeper personal problems underlying the antisocial behaviour. Casey and Berman's meta-analysis (1985) also addressed this issue of whether therapy with children worked better for some disorders than for others. Unfortunately, most studies reported little diagnostic information and no firm conclusions were able to be made. Weisz et al., (1987) focused on children with over controlled as opposed to under controlled problems and found that therapy made significant improvement for all problem types. They again had to contend with vague problem descriptions.

Management of Children with Emotional and Behavioural Disturbances in Education Systems

Research in special education for children with emotional and behavioural problems has been plagued with difficulties. Foremost amongst these has been the problem of what label to give children whose behaviour is maladaptive. This issue will be addressed followed by a discussion of the main approaches to management of these children in education.

Nomenclature and Definitions

Reinert (1972) points out that the term "emotionally disturbed" crept into the literature some eighty years ago and has become widely used by the public as well as by professionals but with no universally accepted definition. There are as many different definitions of emotional disturbance as there are perspectives.

Other terms used to describe this population are numerous. The most commonly utilised are: seriously emotionally disturbed, behaviourally disordered, children in conflict, emotionally impaired, maladjusted children, problem children.

Boyle and Jones (1985) distinguish between emotional disorders and behavioural disorders. Emotional disorders are those identified by groupings of symptoms that represent affective states of consciousness whereas behavioural disorders involve symptoms that represent socially undesirable patterns of behaviour. Behavioural disorders are usually directly observable and require less interpretation than do emotional disorders.

There is consensus among the various writers (Bower, 1982; Kauffman, 1979, 1985; McDowell, Adamson, & Wood, 1982; Boyle & Jones, 1985), that children with emotional and behavioural disturbances have persistently dysfunctional mental processes and associated effects and behaviours. Their behaviours do not fit with the expectations of those with whom they come in contact and they are unable to make satisfactory relationships with

others.

The categorisation of emotional and behavioural disorders remains unreliable with different descriptions meaning different things to different audiences. There is no single classificatory system that is uniformly adopted either in practice or in research. Clinically derived classification systems include both the International Classification of Diseases (ICD) developed by the World Health Organisation and The Diagnostic and Statistical Manual of Mental Disorders (DSM 111-R) devised by the American Psychiatric Association in 1980 and revised in 1987.

There are also systems based on multivariate analysis such as the Behavior Problem Checklist (Quay and Peterson, 1975), the Child Behaviour Checklist (CBCL) (Achenbach & Edelbrock, 1983, 1987), or that proposed by Ross (1980). Problem behaviours are statistically analysed through factor analyses and meaning is imposed on clusters of behaviour that occur together.

In spite of radically different methods there is some convergence which provides a simple and practical approach to the categorisation issue and covers most of the commonly observed behaviour disorders in school. Each approach recognises a constellation of problem behaviours among children and adolescents. Quay (1979) identifies these as:

1. Childhood Psychoses
2. Mental Retardation
3. Acting out or Conduct disorder

4. Social Withdrawal
5. Immaturity or Attention Deficit
6. Delinquency.

Historical Perspective

Prior to World War 11, children with emotional disturbances and behavioural disabilities were seen to be mainly the responsibility of mental health professionals rather than educators. Treatment involved the removal of the child from the school setting whether for short-term therapies or long term placement in special schools and institutions. Placement was usually associated with psychiatric inpatient services and the emphasis was on the psychiatric treatment of the child. Punishments, suspension, and exclusion were the only approaches to the management of children with emotional and behavioural disorders in schools.

Beginning in the 1950's in the USA pressure shifted to schools to provide more appropriate integrated services with an educational emphasis (Kauffman, 1979). Off-site units for disturbed children were a direct consequence of this pressure.

These units became popular in the U.S.A throughout the 1960s and 70s and continued to grow after the Education for All Handicapped Children Act PL-142 (1975). This act mandates that all children have a right to a free public education which maximises their academic and behavioural potential through individual education plans

implemented in the least restrictive environment. School districts were thus expected to provide a range of services to emotionally disturbed children and, for many, the psychoeducational day school represented the appropriate setting. Zimet and Farley (1985) report there were ten day-treatment programmes available in 1961, 90 in 1972 and a proliferation of programmes over the next decade to 353 in 1981.

A similar pattern exists in the United Kingdom. In the 1930's a handful of pioneer Child Guidance Clinics received financial support for provision of services to emotionally disturbed children. The public became more widely aware of difficult and disturbing students during the Second World War following evacuation of children from inner city areas (Galloway 1982). In 1944 the Education Act accepted some responsibility for these children with a vague definition of maladjusted pupils as being those "who show evidence of emotional instability or psychological disturbance, and who require special educational treatment in order to effect their personal, social and educational readjustment" (Galloway, 1982, p. xiv). By 1950 there was a need to clarify these regulations and a medically dominated Committee of Enquiry was established. Mongon (1987) notes that this committee could only find 17 part-time classes for maladjusted children and no full-time classes outside the special school system; the idea of units had not yet taken hold.

As education accepted more and more responsibility for these students, facilities designed to support them

began to burgeon. In 1955, only 140 educational psychologists were employed by learning education authorities in England and Wales, however by 1970 the number was over 900. It became clear in the 1960's and 1970's that existing special school facilities could no longer cope with the increase of troublesome behaviour in schools. The response to this was the development of units to which educational psychologists could make direct referrals. The peak years for establishing such units in the UK were 1974 and 1975. By 1976, 72% of Local Education Authorities surveyed by Her Majesty's Inspectorate had established units for disruptive children, with 168 offsite units identified (Ling and Davies, 1984).

These units have taken many forms and go under a variety of names. This reflects the variety of systems, with different and sometimes opposite philosophies and practices which have developed over the years to cater for these children (Ward, 1983).

Present Status Internationally

In the late 1970's responsibility for these children became more and more that of the education service in each country. Educational psychologists took over as the pre-eminent professionals within the system for identification, assessment, referral, and programming. In 1975 in England this change was officially recognised and doctors were no longer formally required to certify

students as maladjusted.

The Warnock Report (1978) advocated a threefold expansion of educational psychologists by calling for a ratio of one educational psychologist per 6000 of the population aged from birth to 19 years. Although economic conditions in the 1980's ensured this remained a recommendation, rather than a reality, there has been dramatic growth in the provision of professional services to children in Great Britain over this decade. The growth of units for disruptive students has continued so that Ling and Davies (1984) located 400 off-site units offering places to 7000 students.

However it has become increasingly clear that they are developing on an ad hoc basis. It is not clear exactly how many schools have established their own units in parallel with those set up by education authorities to cater for pupils from a large number of schools (Galloway, 1982).

Zimet (1988a, 1988b, 1988c, 1988d, 1988e) has investigated day treatment programmes for disturbed children in Sweden, France, The Netherlands, Norway, and Switzerland. In Sweden facilities for disturbed youth although in place prior to the 1980's were described as poor throughout the country. They have only recently grown and developed as the community is demanding easier access to the best care available. In 1987, although evaluation and treatment facilities had high performance standards, there was a severe shortage of placements and personnel and no apparent plan to address this. Psychoanalysis is

most often the theoretical orientation adopted, although most child treatment is seen as occurring within carefully controlled environments and is referred to as environmental therapy. This appears to be similar to the ecological approach to be discussed later. Research is a very low priority at this time in Sweden (Zimet, 1988a).

In France such centres are a well established form of treatment, again usually with a psychoanalytic base. Only two of the many centres discussed carried out any research, although most professionals indicated a desire to do so (Zimet, 1988b). Research was hampered by a lack of funds also in the Netherlands, was considered a luxury in Norway and was being planned in Switzerland (Zimet, 1988c, 1988d, 1988e).

In the 1980's there was considerable literature questioning the effectiveness of these units and the population the units best serve (Slee, 1986; Mongon, 1987; Galloway, 1982; Topping, 1983; Morse, 1985). There was concern that children were being identified for special services without sufficient diagnostic information to support and direct specific programming and interventions. Rezmierski, Knoblock, and Bloom (1982) shared the concern that programmes in operation appeared to be often determined by financial and service definitions than by theoretical information or by the needs of the children.

Discussion in the literature has generally been critical, focusing on the limitations and disadvantages of these units for emotionally disturbed children. This combined with the rising importance of mainstreaming has

meant that the popularity of these units in the UK. and the U.S.A. has waned throughout the late 1980's. Public policy makers are understandably reluctant to allocate scarce funding to what is seen as a poorly evaluated and ill-defined concept.

Treatment Approaches

There are three main approaches to the management of emotionally disturbed children in psychoeducational centres: psychoeducational, behavioural and ecological. Each orientation has a unique set of assumptions regarding aetiology of the disturbance and different targets for remediation. Most centres offer programmes with a mixture of these approaches although a primary orientation is usually evident.

Psychoeducational Approach.

Morse, Cutler, and Fink (1964) in an early classification of the dimensions running through programmes for emotionally disturbed children describe the psycho-educational approach as that in which "Educational decisions were made with a consideration of underlying and unconscious motivation" (p. 29). Educational, clinical, cognitive, and affective influences are balanced and interwoven and information from a variety of sources is used to understand children.

The model had it's roots in psychoanalytic theory,

but has developed beyond this to consider the balance and dynamic interplay between education and therapy (Rezmierski, Knoblock, & Bloom, 1982).

Programmes with a psychoeducational orientation.

La Vietes, Hulse, and Blau (1960) describe the tentative outcomes of the first seventeen cases treated for at least one year in a psychoanalytically oriented day treatment school for severely disturbed children. The children were all aged between 5 years and 8 years and presented with severe school difficulties. Criteria for acceptance into the programme included a relatively intact family situation and the expectation that the children would be able to fit back into the regular school within three years of their admission to the programme. The children were separated into two groups, "moderately and severely sick (children), both with difficulties in school adaptation" (p. 477). The judgements were made by a multidisciplinary team consisting of psychiatrist, psychologist, paediatrician, social worker, and teacher. No conclusive data was presented although impressions were derived from the judgement of staff, the opinions of parents, psychological examination, and the ability of parents and children to adapt to situations they previously found difficult. The main criterion for improvement in this study was rate of return to regular school. In both groups, all were considered to have improved symptomatically. Four had returned to regular

classes and two were expected to within a few months. Of the more severe cases seven improved enough to avoid residential placement. All families were deemed to have improved significantly, becoming goal directed and independent. It was noted that parent involvement in the casework was significantly related to behavioural and academic improvement.

Seven years experience of the work at this centre was subsequently reported on by La Vietes, Cohen, Reens, and Ronall (1965). In this paper the outcome status was reported for 38 children, the measures being current school placement and ability to function in a community school. Seventy six percent were reported as having "good" results and 24 percent having "unsatisfactory" results. Each child's improvement was measured against his own baseline upon admission. The authors reported that there was no significant change in IQ scores for the group. For the more severely disturbed these authors found that despite improvement, the diagnosis and essential symptoms remain "unalterably the same" (p. 167).

Zimet and her colleagues present data describing personality and behaviour characteristics of children with emotional and behaviour disorders during and following treatment in a psychoeducational day treatment centre. The centre described is similar to that which is the focus of the present paper in terms of population size, problem types, and treatment programme. The centre caters for 24 children and this particular study involved 75% boys and 25% girls although the total number actually involved in

the research is not given in the paper describing the study. Positive changes in school behaviour, academic performance, home behaviour, IQ scores, and self concept were reported after two years in the programme and again at two follow-up points after discharge. As is often the situation in these studies no control groups were available. A one group pretest-posttest design was used (Zimet et al., 1980).

Behavioural Approach.

The basic assumption of this approach to managing the behaviour of emotionally disturbed children is that they have learned deviant behaviour patterns. These maladaptive behaviours are acquired and maintained in the same way as are more adaptive behaviours. Therefore they can be "unlearned" and replaced by more socially appropriate behaviour. Intervention procedures are designed around the behavioural excesses and deficits of the children and the systematic manipulation of consequences. The main strategy used is to restructure the environment so as to reinforce appropriate behaviours. Contingency contracting, token economy systems, and skills training are all used to achieve this restructuring.

Programmes with a Behavioural Approach.

Maher (1981) presented an initial evaluation of a special education day school for emotionally disturbed and

socially maladjusted adolescents. Presenting problems included such conduct problems as: truancy, aggressiveness, disruptive classroom behaviours, and refusal to complete assignments. The school operated on a broad based behavioural philosophy with educational programmes in traditional academic subjects, special subjects, and life-skills training. Individual education plans were developed for each student.

Outcome was measured in an innovative manner by rated changes on Goal Attainment Scales (GAS) and a Programme Satisfaction Questionnaire administered to all 45 students at the end of the academic year. The GAS gives a global index of the degree to which outcome measures have been realised. It appears complex to implement, requiring specialised training of the teachers involved. The results indicated that 53% of students met or exceeded behaviour goals as measured by the G.A.S. Students generally rated the programme as beneficial, especially appreciating the clarity of programme expectations, consistency of teacher management of behaviour, diversity of curriculum, and staff involvement.

Le Vine and Greer (1984) describe the long-term effectiveness of the Adolescent Learning Centre, a classroom for emotionally disturbed adolescents. Students were eligible for placement in this centre if attempts to effect positive change in their behaviour had failed in the regular school system. The class serviced seven or eight students who were integrated at various times according to their needs. The teacher's primary

therapeutic role in this centre was to administer appropriate rewards and punishments designed to ameliorate the disordered behaviour and emotional discomfort. The psychologist's role was to reinforce all appropriate assertive behaviour and verbalisations that lead to personal rewards. As well, students participated in daily group therapy sessions, individual weekly therapy sessions, three week-long camps, and family therapy sessions. Twenty four students were followed up. Seven remained in the regular school system, one had graduated from high school, four were living in institutional settings, seven had dropped out of school, and five were not able to be contacted. No control group was possible but subjects were measured on more than one occasion thus serving as their own controls. Results on a behavioural checklist, student attitude questionnaire, and parents questionnaire indicated that gains in emotional adjustment continue to accrue on return to the regular school setting. "Comments by students, parents and teachers suggested that the protectiveness of the environment was an essential therapeutic element..."(p. 525).

Ecological Orientation.

This approach conceptualises emotional disturbance as a lack of fit between the individual and environment. It is a symptom of a malfunctioning human ecosystem (Hobbs, 1983). Ecological strategies involve working with the child to increase or decrease his behavioural repertoire

organisations to facilitate a more supportive response to the child.

Programmes with an Ecological Approach.

The model for these programmes is Project Re-Ed, "a project for the re-education of emotionally disturbed children" (Hobbs, 1983, p. 8) with it's beginnings in the 1960's. The two original schools in this project provided residential care for moderately to severely disturbed children aged between six and twelve years. The numbers in each school were forty and twenty four and they were divided into groups of eight with three teacher-counsellors in charge of each group. Psychologists, social workers, psychiatrists, pediatricians, and other specialists provided consultative services.

Weinstein (1974), reported on the follow-up status of 122 male children treated by Project Re-Ed. The treatment group was matched to a group identified by school principals as in need of treatment. An additional group of normal children was also selected. A variety of instruments were administered at four points in the study: intake, discharge, six-month follow-up, and eighteen month follow-up. Project Re-Ed was effective in increasing the behavioural adjustment and self concepts of treated children. It also aided in the academic adjustment of children with a history of under achievement. It was not able to improve overall adjustment to the point that treated children were indistinguishable from normal

children. Weinstein (1974) also found that children classified as "acting out" at intake had poorer behavioural and academic outcome at 18-month follow-up than children classified as "withdrawn".

Cote, Harris, and Vipond (1986) describe a structured residential centre for disturbed adolescents and describe in detail one programme shown to be successful in containing and treating them in terms of behaviour and personal development. The programmes included school, farm, and part-time jobs in the community. Social workers and other professionals liaised with staff in the centre. Intensive psychotherapy was offered around crises and also around family situations using consultants. Their research design is unique in that competing explanations of the favourable results were eliminated without the use of a control group.

Baenen, Glenwick, Stephens, Neuhaus, and Mowrey, (1986) report retrospectively on 78 children and adolescents discharged over a six year period from a psychoeducational day school with an ecological orientation. The programme served 32 children divided into four classes from primary to senior levels, each run by a teacher and an aide. Psychologists conducted individual, group, and family therapy and consulted with school personnel after exit from the programme. Children were exited when staff judged them capable of reintegration into the regular school system or unable to benefit from further treatment. The study concluded that children and families significantly improved in functioning, but that

they would continue to need long-term assistance in the form of post discharge services to meet environmental demands. Criteria used included rate of return to the regular school system as well as behaviour change scores on a number of variables including child behaviour change, reading achievement change, math achievement change, change in family structure, and family change. The main thrust of their study was to examine the importance of clinical factors in predicting outcome from this programme. The clinical factors examined were: problem type, entry problem severity, nature of previous services, and rate of absence. Intellectual, academic, demographic, and family variables were also examined. The present study drew on the design and outcome measures from this study by Baenen and his colleagues. The conclusions from this study were that clinical factors were important in predicting outcome and that despite improvement those most disturbed on entry to the programme remained most disturbed at exit and on follow-up. As with all field research sound experimental methodology is difficult to achieve. This particular study acknowledged limitations, such as reliance on retrospective data, the lack of a control group, and entry and exit ratings made by the same judges. However it examined a large number of relevant prognostic factors in a manner that assessed their independent and combined influences on the outcome, providing a substantial contribution to existing research.

Integrated Approach.

This description is used when multiple elements of the psychoeducational, behavioural, and ecological orientations are utilised without a primary orientation being evident.

Programmes with an Integrated Approach.

Halpern, Kissel, and Gold (1978) investigated the follow-up status of 114 children treated in a day treatment centre operated by a mental health agency. The children were aged between 3-13 years; fifty were followed over a ten year period and sixty four over five years.

The programme involved "the whole gamut of teaching modalities and socialising tactics that can be fitted into the available timetable in a controlled fashion" (p. 321). Class sizes were about six with one to two teachers involved intimately with them over the school day. Initially the programme focused on the child's readiness to learn. Greater emphasis was placed on academic demands as the child settled into the programme. There was an emphasis on "routine, regularity, and reward" (p. 320) and the programme was continued throughout the long vacation in order to prevent regression.

Follow-up status was assessed through teacher and parent ratings. The results indicated that 75% of the first group and 83% of the second group were able to return to, and be maintained in, public school settings

with the remainder being placed in residential or alternative day treatment facilities. Of those in regular school, 67% required special education services. For both groups combined, 80% of parents, but only 33% of teachers rated adjustment as "average or better" (p.323).

Friedman and Quick (1983) describe a multidimensional treatment programme for disturbed children that involved a supporting, caring environment, behaviour management, family services, counselling, and conflict resolution. Over a five year period 133 youngsters were accepted into the programme all meeting public school criteria for being "emotionally disturbed". Children were exited when most of their treatment goals were attained and only after staff had carefully planned their discharge. Outcome was reported in terms of meeting treatment objectives and completion of the programme. Progress in academic areas was also measured. There was no control group. Overall they reported that participants who remained until ready to leave showed favourable short term and long term outcomes when assessed at one and two years after their exit but a relatively high percentage of participants did not remain until completion. Academically there was an average gain in reading of 1.48 months for every month in the programme and 1.31 months in maths. Living situation was also recorded and showed considerable stability over the course of the programme and into follow-up.

A Study Across Approaches

One study which has investigated a number of programmes regardless of their orientation was that conducted by Kolvin and his colleagues in Britain (Kolvin et al., 1981). In this massive study the outcomes of a number of different interventions for maladjusted children in English schools were examined. Two types of dysfunction; neurotic and conduct disorder, as measured by the Rutter Teacher and Parent scales were investigated. Two age groups were also selected; juniors aged 7-8 years and seniors aged 11-12 years. Over 4000 children were screened to identify a final group of about 600. Interventions included parent counselling, teacher consultation, nurture work, group therapy, and behaviour modification.

In general, for the junior group, play group therapy and nurture work led to greater positive changes than the no-treatment condition, parent counselling, and teacher counselling. For the seniors, group therapy and behaviour modification led to greater change than the parent teacher counselling or the no treatment. For both seniors and juniors, the children defined as neurotic improved more than the conduct-disorder group.

Factors Related to Outcome

The programme and cost-effectiveness of treatment can be improved by selecting children most likely to benefit

from the services. The literature on factors which may be related to successful outcome in psychological treatments with children is instructive on this issue.

Kazdin (1988) identifies a broad range of potential moderating factors. He regards the most important factor as being the type of dysfunction manifested by the child. Evidence suggests that children with acting-out or conduct problems, in comparison to children with problems of over-control such as anxiety or withdrawal, respond poorly to psychotherapy (Kazdin, 1985). This is supported by the work done by Robins (1986) on the stability of conduct disorders over time and by Gelfand and Peterson (1985) who found that children rarely overcame severe problems including conduct disorder, autism, psychoses, under-achievement, and rejection by peers. However, improved diagnostic criteria and problem descriptions are needed before populations homogenous on these variables can be compared.

Kazdin views two other important moderating variables in the child as being age and gender. He believes problem behaviours vary greatly as a function of these two variables. He cites a study by Miller, Barrett, Hampe, and Noble (1972) where younger children (6-10 years) showed greater improvement than older children (11 years plus) for treatment of phobias (In Kazdin, 1988). It is a frequently voiced assumption that treatment is more effective with younger children however the evidence is mixed. Stotsky, Browne, and Philbrick (1974) found that children above age 15 at intake tended to have better

post-treatment school adjustment than those below age 15 after treatment in day and residential schools. This study had a predominantly male population and targeted children aged 13-16 years using the Rutter scales.

Prentice-Dunn, Wilson, and Lyman (1981) report that younger children showed greater behavioural improvement after residential and day treatment programmes for emotionally disturbed youth. In this study children were aged six to sixteen. Corkey and Zimet (1987) found that early age at entry to day treatment appeared significantly related to more mature perceptions of relationships with parents in young adulthood. This study also reported that those who entered treatment when they were younger also tended to be less severely disturbed than those entering treatment when they were older.

Thus the evidence is equivocal with few studies designed to systematically assess the influence of age on outcome at treatment.

This is true also for child gender as a variable which might influence treatment outcome. It is well known that boys tend to bring more externalising disorders to treatment whereas girls tend to show more internalising disorders (Kazdin, 1988). However few studies relate such differences to treatment outcome. In the Kolvin et al., (1981) study discussed previously, girls responded better to various treatments than did boys. This study also reported neurotic behaviours to be more easily changed in boys than in girls whilst antisocial behaviours were more easily changed in girls than in boys.

Parent and family characteristics such as socio-economic status, marital discord, parent psychopathology, and social support systems also moderate the effects of treatment (Kazdin, 1985). Rutter & Giller (1984) also discuss how such factors as single-parent families, parent psychopathology, family size, and marital discord are related to long-term prognosis of child behaviour and influence the extent to which treatment can have impact. These factors are often unreported in outcome studies.

Treatment issues such as the conceptual base of treatment, procedural specificity, and treatment integrity as well as therapist issues such as type of training and therapist characteristics are further variables which may influence the outcome of therapy with children but have yet to be fully investigated (Kazdin, 1988).

In psychoeducational settings child and family characteristics related to outcome have been examined. The most recent study to take this approach is that by Baenen, & Glenwick, et al., (1986). They retrospectively rated clinical, academic, and demographic variables from programme files and related these to the status of the children at exit. The clinical variables as discussed previously included problem type, entry problem severity, nature of previous services, and rate of absence. Intellectual-academic variables included intelligence, entry reading achievement, and entry mathematics achievement. The demographic variables were age, gender, and family living situation. Family characteristics measured in this study were entry family disturbance and

family involvement in treatment. The duration of the programme treatment was also considered a variable. The results supported the importance of clinical factors in predicting outcome in psychoeducational day school programmes. Children with "immature" disorders had comparatively better outcomes whilst those with "conduct disorder" diagnoses still had the more severe problems at exit and more changes in family structure during treatment.

Prentice-Dunn, Wilson, and Lyman (1981) also examined the influence of nine client variables on treatment outcome on 50 children discharged from residential and day treatment settings. The centre in this study providing a behaviourally oriented programme to emotionally disturbed children aged between six and sixteen. Generally, students were non-psychotic but experiencing school and community adjustment problems. As well as finding age to be a significant predictor of behavioural improvement, they report IQ to be negatively related to behavioural outcome. They explain their success with the less intelligent children as being a function of externally imposed contingency management rather than verbal or insight oriented procedures. This study also found parental involvement to be a critical factor in a child's response to treatment.

Summary of Outcome Studies in Psychoeducational Settings.

Baenen, Stephens, and Glenwick (1986) in a review of the outcome literature report "that most programmes, regardless of theoretical orientation, consistently report positive changes in their treatment populations" (p. 265). Approximately two-thirds of treated children appear to successfully re-integrate into regular school systems. The rate appears to increase with less seriously disturbed populations. They conclude:

> "For those children who do not return to regular schools the prevailing impression is that the programmes at least obviate the need for referral to more restrictive environments. The ability of the programmes to maintain a child in the community is an additional benefit for the child, his family, and the community" (Baenen, Stephens, et al., 1986. p. 265).

This review also discovered that:

> "When clinical judgement, behaviour ratings or psychological tests are used as criteria for assessing behaviour change, almost 80% of treated children are considered to be improved. However it seems that despite improvement, treated children are still viewed as different from normal peers" (Baenen, Stephens, et al., 1986. p. 265).

In summarising the academic data Baenen, Stephens, et al., (1986) conclude "that improving academic performance is more difficult to achieve, of less magnitude, and of shorter duration than behavioural improvement" (p. 266).

It seems that almost two-thirds of treated children require special education services after discharge from unit programmes.

There has also been considerable literature to support Baenen's finding that parents of treated children believe their children to be better adjusted than their class teachers do and also feel more able to respond appropriately to their children (Verhulst & Akkerhuis, 1986, Baenen, Stephens, et al., 1986).

The studies also support some tentative hypotheses regarding the relationship of some variables at entry to progress and outcome in these settings. The degree of problem severity at entry, the type of referral problem and the degree of family disturbance are all related to problem severity at exit and follow-up. Children with conduct disorders or acting-out behaviours are consistently rated by staff, parents, and teachers as improving less in psychoeducational treatment and having poorer adjustment at follow-up than those with "anxiety-withdrawal" disorders (La Vietes et al., 1965; Weinstein, 1974; Baenen, & Glenwick, et al., 1986). This finding is consistent with that which examines the effects of psychotherapy with children (Kazdin, 1985).

Methodological Considerations

A variety of methods have been used in attempts to evaluate the outcomes of programmes for children with behaviour and emotional problems. The differences in

programme goals, modes of operation, and theoretical frameworks have resulted in different approaches to the question of evaluation. The types of data collected include achievement tests, academic measures, intelligence measures, social/emotional/behavioural measures, and archival data.

Measures of outcome are also varied. Rate of re-integration into regular classrooms is the most common measure used to evaluate the success of a programme. This, however, is dependent on such factors as discharge policy, availability of support services, and family support.

Another measure often used is age or grade level achievement. This too is an unreliable measure. Corkey and Zimet (1987) using object relations theory suggest that social relationships ratings of children by their peers or by their teachers provide an important predictor of social and emotional adjustment at later stages of life. However in their review of the literature they discovered that in 20 years of research scant attention had been paid to the long-term evaluation of outcome in day treatment centres and that no study had looked at social relationships as a predictor outcome variable.

Topping (1983, p. 14) in summarising the paucity of critical data in England, cites Cook et al. (1972) who investigated 272 programmes for emotionally disturbed children and found that only 103 had any data on academic or behavioural gains which might have indicated programme effectiveness. Of these only 11 had sufficiently clear data to make results replicable. Other measures used to

gauge the success of a programme have included clinical assessment, behaviour ratings, and psychological testing.

George, George, and Grosenick (1989) report that a general consensus amongst programme evaluators does exist regarding fundamental evaluation standards for judging the success of programmes for children with emotional and behaviour disorders. Student progress in the programme was targeted as a critical measure of a programmes success. Student movement to a less restrictive environment and student success in regular education were also rated highly. The long term effects on the students themselves, as they interact in family and community settings, was also rated an important measure of a programmes success. The least important criterion reported by this study was student scores on competency tests.

Since there is no general consensus about what a unit is, it is important that the particular system being discussed is distinguished by clear description to allow for objective replications and comparisons. However, many of the evaluation studies are often short on description, so that the nature of the programmes resulting in change is unknown. Unfortunately, many of the descriptive studies have poor or no evaluations.

There also tends to be a frequent reliance on retrospective records. These typically contain incomplete information, provide minimal objective data, and are difficult to verify. Thus reported findings have limited reliability and validity.

Most studies do not include long-term follow-up data.

Nicholson and Berman (1983) note how it is important to examine whether improvement during therapy persists once treatment has ended. If deterioration occurs, how much improvement is maintained? They also point out that sometimes effects of therapy do not emerge until months or even years after it has ended.

Baenen, Stephens, et al., (1986) found only thirteen outcome studies which specified treatment populations, provided adequate programme descriptions, and reported both objective measures and clinical judgements of outcome; seven of these focused on exclusively schizophrenic children or adolescents.

A final consideration is the need to analyse the critical components of these psychoeducational programmes. They contain a variety of services such as psychotherapy, parent counselling, special education, low student-teacher ratios, and warm, positive milieus. No study to date has examined which components are critical for treatment success.

There are no tightly controlled, methodologically sound studies reported in the literature and, in general, the quality of evaluation in the literature is limited, all investigators recognising the practical difficulties in researching a clinical child population.

The present study while acknowledging the difficulties of conducting field work in such a sensitive area has attempted to remedy deficiencies highlighted in the literature. The following methodological issues have been targeted:

1. The provision of a clear description of the centre and it's programmes and treatment population. This will be supplemented by the use of case material;

2. The inclusion of long-term follow-up data;

3. The reporting of both clinical and objective measures of outcome;

4. The examination of the effects of treatment components;

5. The use of a prospective design rather than complete reliance on retrospective records.

Chapter 3

Method

This chapter describes the participants, variables, instruments, and procedures.

Participants

Participants in this research were all boys who took part in the north eastern suburbs S.P.E.R. Centre programme over the years 1985-1988. Those who attended for at least one school year in this time period were included. Two girls fitted this criterion but in order to maintain homogeneity they were excluded from the sample. Six boys were not located at follow-up and one boy who was prematurely withdrawn from the programme was refused permission to participate by his parent. One boy's parent also refused permission to participate in the follow-up, however his data were used for all but this portion of the research. The sample thus consisted of 24 boys whose ages were within the range 5-12 years on entrance to the programme.

Instruments

Standardised instruments

Teacher measures.

"A Children's Behaviour Questionnaire for Completion by Teachers - Child Scale B" (Rutter 1967) was used to measure the main outcome variable. It is designed to provide valid and reliable screening measures of a child's behaviour at school. The questionnaire consists of a series of 26 behavioural items to which the respondent replies " does not apply - scored 0"; "applies somewhat - scored 1"; "certainly applies - scored 2". The scales provide a total problem score consisting of the unweighted sum of scores for individual items. Scores on subscales measuring antisocial behaviour, hyperactivity, and neuroticism may also be derived. It has been used by Rutter in large scale epidemiological surveys in the Isle of Wight, where it's reliability to discriminate between antisocial and neurotic disorders was tested by comparing questionnaire results with clinical diagnoses from case notes (Rutter, Tizard, & Whitmore, 1970). It has been validated on child populations many times in Britain (Ryle & Mc Donald, 1977; Cochrane, 1979) and Europe (Zimmerman-Tansella, Minghetti, Taconi, & Tansella, 1978). More recently McGee et al., (1985) and Venables et al., (1983) have reported valid results on the use of this instrument with New Zealand children and children on the island of

Mauritius respectively. In the McGee et al., (1985) study a large sample of seven year old children were rated on this questionnaire and the data factor analysed. Three main factors were identified: aggressiveness, hyperactivity, and anxiety-fearfulness. Measures on these three factors had reasonably high levels of reliability (coefficient alpha = 0.83, 0.82, 0.72 respectively) and were stable over two years. Venables and his colleagues used a sample of over 1000 seven to eight year olds and report that the factor structure was stable for sex and racial groups (Venables et al., 1983).

The questionnaire is designed to be used with children in the middle age-range (7-13 years). Place (1987) however used this scale to detect disturbance in adolescence and found the antisocial scale of this checklist to be as useful at assessing conduct disorders as the scale's total score. When this scale was compared with other renowned behavioural scales it had the best overall performance. Graham and Rutter (1973) also used this scale reliably with adolescent populations. It is thus a reliable and valid short questionnaire which teachers can be expected to complete quickly. It can be used to discriminate between different types of emotional disorder, as well as between children who show disorder and those who do not.

Parent measures.

"A Children's Behaviour Questionnaire for Completion by Parents - Child Scale A " was used. This scale consists of 31 items containing almost the same questions as in the parallel form for use by teachers. It was designed for use with children aged nine to thirteen years of age. It has additional questions on somatic complaints, enuresis and encopresis, temper tantrums, and eating and sleeping difficulties. Rutter, et al., (1970) report retest reliability coefficients and inter-rater reliability coefficients to be 0.74 and 0.63 respectively. They also reported diagnoses from the questionnaire to have an 80% agreement rating with clinical diagnoses, indicating a high discriminative power and validity (Rutter et al., 1970). Graham and Rutter (1973) have also used this questionnaire successfully with adolescents in their last year of compulsory schooling.

Reading achievement.

Reading stanines from the Neale Analysis of Reading Ability-revised (second edition) (Neale, M.D., 1988) were chosen as the measure of reading achievement. This is a diagnostic reading test widely used in the school psychological service of Western Australia. It examines word recognition, general reading habits, and gives a reading accuracy score and reading comprehension score.

The Australian data is presented as percentile ranks,

stanines and aged norms. Over 1000 children from two Australian states, Victoria and South Australia were used in the standardisation procedures. Scores reported in the manual for stability, reliability, internal consistency and standard error of measurement of the test all indicate a high reliability. Scores for stability reliability were all above the .001 level of significance. Content, predictive, and concurrent validity data are also presented and are all statistically significant and of large magnitude, giving a great deal of confidence in the use of this test.

Intelligence.

The Wechsler Intelligence Scales for Children-revised (Wechsler, 1974) was the instrument chosen to provide a standardised measure of the students ability. This is a well regarded clinical and diagnostic tool in the areas of educational assessment and the appraisal of learning and other disabilities. It is normed on American children aged 6.5-16.5 years but an Australian version is widely used in the School Psychology Service of the WA Ministry of Education. Detailed rationale, reliability, and validity data are to be found in the manual and throughout the literature. The standardisation procedures drew on a sample of over 2000 children, using a stratified sampling technique in order to ensure a representative sample. Split-half reliability coefficients and test-retest coefficients are reported for each age group. High

reliability's are reported across all age ranges for the Verbal, Performance, and Full Scale IQ's and satisfactory reliability's for individual tests. It's validity was measured by comparing scores on this test with other well known intelligence tests. It yielded similar IQ scores.

Study specific instruments

Problem type.

The boys were classified as acting out, withdrawn, socialised delinquent, or presenting with immature behaviour problems according to criteria described by Quay (1979). The category, mixed disorder, was used by the school psychologist where a boy had been described as displaying behaviours relevant to two or more categories with neither dominating. This category was adopted from that used by Baenen (1983). The criteria for each of these problem types is summarised below.

Acting out: fighting, hitting, temper tantrums, disobedient, destructive, impudent, uncooperative, disruptive, negative, restless, irritable, attention-seeking, dominating, dishonest, profane, argumentative, steals, teases, irresponsible.

Withdrawn: anxious, shy, friendless, depressed, hypersensitive, self-conscious, feels inferior, lacks self confidence, easily flustered, aloof, cries frequently.

Immature: short attention span, poor concentration, daydreaming, clumsy, absent minded, passive, sluggish, inattentive, drowsy, lacks interest, lacks perseverance.

Socialised delinquent: has bad companions, steals in company with others, loyal to delinquent friends, belongs to a gang, stays out late at night, truant from school, truants from home.

Mixed: Behaviours meet the criteria for more than one category with no pattern predominating.

Problem severity.

The number of symptoms, their described intensity, and their effect on the child's adjustment at home, school and with his peers, were the basis for the ratings of problem severity. A 10 point scale devised by Baenen (1983) was used where:

1 - indicated no disturbance.

3 - indicated a mild disturbance.

5 - indicated a moderate disturbance. The boy was capable of marginal adjustment in certain circumstances.

7 - indicated a severe disturbance. The behaviour problems interfered with any sort of adjustment in most instances.

9 - indicated a profound disturbance. The behaviour problems were totally disabling and no adjustment was possible.

Family disturbance.

The intensity and type of family disturbance was rated according to this four point scale used by Baenen (1983).

1 - indicates no disturbance beyond the normal range.

2 - indicates mild disturbance, where basic integrity is intact.

3 - indicates moderate disturbance, where problems are significant.

4 - indicates severe disturbance, where problems are extreme and family adaptive coping is minimal.

Family involvement.

This four point scale used by Baenen, (1983) was used to measure the involvement of the family during the programme:

1 - indicates a very co-operative attitude. Parents were willing to share most relevant information and follow recommendations, and were supportive of the programme.

2 - indicates a somewhat co-operative attitude. Parents shared some information, and made attempts to follow staff recommendations.

3 - indicates an indifferent attitude. Parents showed little interest and their attendance and sharing of information was minimal.

4 - indicates an antagonistic attitude. Parents were

hostile to the programme and unco-operative in sharing relevant information.

Follow-up instruments

Any overall psychological assessment of a child requires data from different observers who even if they disagree, independently contribute valuable information for psychoeducational decisions. People giving information about children differ in the way they relate to them and there are often variations in children's behaviour across situations as well as differences in informant's judgements. Whilst it is of great importance to collect information in standardised forms for purpose of comparability, Pervin (1985) makes a strong case for the need for research that appreciates the complexities of the individual. He advocates the use of self-report techniques in research suggesting that one of the best ways to obtain information from research participants is to question them, as long as they understand the question, have the information, and are not motivated to deceive the interviewer.

In this study a series of questions were asked of teachers, parents, and the boys themselves concerning their perception of behavioural change and the child's experience in the programme. Thus the collection of multiple viewpoints should result in a broadly integrated picture of each subject and indicate the changes which have occurred between initial referral and final follow-up.

Teacher interviews.

Teachers are the key informants on children's school functioning. They spend the most time with them in this setting and are usually the best informed about their day to day behaviour in the classroom and playground. They are also able to compare a particular child's behaviour with a large group of peers. The school context with its particular academic and social demands may reveal difficulties not evident in other settings (Verhulst & Akkerhuis, 1986).

The boys' current teachers were interviewed and asked to describe the boys' behaviour over the past six months. They were also asked to rate their social adjustment. A four point scale was used for each participant where:

1 - indicated a high degree of adjustment and acceptance in his peer group.

2 - indicated a reasonable level of adjustment.

3 - indicated he was managing but had some problems in relating to others at school.

4- indicated a poor level of social adjustment.

Parent interviews.

Parents are obviously an important source of information about their child's behaviour in many situations. Even if their judgement is affected by their relationship with the child, their perceptions have valid implications for the child's long term adaptation. Interviews as well as standardised rating forms are effective methods of data collection from parental sources (Verhulst & Akkerhuis, 1986).

In this study the boy's parents or guardians were interviewed. A 15 item semi-structured schedule was used to gauge their perceptions of the S.P.E.R. Centre experience for themselves and their child. A copy of this is attached in Appendix B.

Student interviews.

It is important also to interview children to obtain a full understanding of their situation. It has however been documented that young children are less able to give reliable accounts of their behaviour than are adolescents and adults (Verhulst and Akkehuis, 1986).

The boys, young adolescents at the time of this follow-up, were interviewed using a 14 item semi-structured schedule, regarding their experiences in the S.P.E.R. Centre. A copy of this is included as Appendix C.

Procedure

Baseline data were collected on each boy from his referring school and parents on referral to the centre. Behavioural data were collected at entry and at 6, 12, 18, and 24 month intervals whilst boys were involved in the programme and again on integration into regular classrooms. Therapy notes were made routinely by the psychologist in charge throughout the course of therapy. Follow up data were collected by the psychologist in charge with parents and students permission. The follow-up interviews were all conducted by this same psychologist.

All data were coded numerically for the analysis and all names used in case notes are fictitious.

Assignment to treatment groups

Boys were assigned to the therapy group on the basis of their problem type. Boys for whom there appeared to be affective disturbance such as the withdrawn, immature, and mixed disorders were considered candidates for therapy. Those boys who exhibited mostly acting out problems with no underlying turbulence apparent were usually not assigned to therapy. It was believed that the behavioural modification programme and therapeutic milieu of the centre would sufficiently ameliorate these problem behaviours enough to warrant return to the regular school system. Research indicates that acting out disorders are more effectively treated by behavioural programmes where

consequences are altered for specific aggressive and prosocial behaviours in the relevant settings such as school, home, or the community, rather than therapy programmes (Kazdin, 1985; Chamberlain & Patterson, 1985). "In fact, treatments encouraging self-exploration or expression of aggressive feelings (have been) associated with increased levels of aggression" (Chamberlain & Patterson, 1985 p. 237). Thus the allocation to treatment group was inextricably linked with the type of problem manifested by the boys. Two cases are presented here to illustrate this.

1. Mel.

Mel was a nine year old aboriginal boy with a long history of disruptive and disobedient behaviours at school. He rarely attended school but was often involved in acts of vandalism at the school both within and outside school hours. Behaviours described by the referring psychologist included fighting in the playground, loud swearing in class, playground, and at staff, biting, running away from class, stealing, kicking, hitting, pushing, refusal to work, bringing sharp knives to school, and threatening other students.
Mel's mother attended the intake interview. She was quietly spoken and co-operative and expressed concern that Mel was forever being suspended and was unlikely to learn. She felt a smaller school might be able to contain him. Mrs M. indicated her previous contacts with school authorities had usually been negative. She said Mel had always been "different" and was "one child in a million". He was hard to keep home, he needed to get out and about, and would wander away from home from a very early age. He had an affinity for his maternal grandmother who lived in

a country town about 100 kms away and it was not uncommon for him to make his own way there. She felt when he was at home he was mostly well behaved and co-operative however when he took off he would get into all sorts of trouble, often with his cousins. She felt that discipline in the home was inconsistent but also that Mel had yet to receive any logical consequences for his actions against the community other than those his parents provided.

Mel presented as an extremely clean and neatly dressed child. He was very fit and athletic in appearance. On his initial visit he offered minimal verbal contact or eye contact but familiarised himself with objects and people in the centre. He seemed quietly positive about what he saw and did not object when his mother suggested he come back to this school. Although quiet Mel's presence was felt by the other children in the centre.

Intensive resources were demanded of the centre initially, to gain the trust and co-operation of both Mel and his parents through home visits, phone calls, and structured interviews at the centre.

Very clear limits were set for Mel within the centre, including the centre playground. Mel had to earn the right to venture into the host school yards. This seemed important to him but took some time to achieve. In class he was given very small tasks and time to accomplish them. He required one-to-one supervision in the classroom and seemed to enjoy this, building a very close relationship with those who worked with him in this way. He eventually managed to learn to work independently on work that was appropriate to his level. It was important that Mel always had work to continue with as he would act out if left undirected. He thoroughly enjoyed working on the computer and considerable progress was made academically via this medium.

Mel's potential as a warm, caring, playful member of society was clearly seen on school camps. When isolated from all other influences he relaxed enormously and enjoyed interacting appropriately as a nine year old boy.

Although Mel's behaviour was improving in the centre,

he was running riot in the community. He was involved in stealing, glue sniffing, and vandalism all without any real consequences. Amongst his peers he was a tough guy, "the boss", and their pull far outweighed that of the centre. That Mel valued the centre was evident by his reference one day after school when heard saying to his cousins "That place, that's where they learn you". He was at that time proud of his achievements in learning to read and to master the computer.

It became clear to staff that Mel knew what behaviours were expected of him at school. Whether he conformed or not seemed to be related to outside occurrences which Mel could clearly articulate if staff took time to listen. When the adults in his life took control Mel would behave reasonably well, however, when this lapsed Mel became the tough guy, "the boss". At this point staff decided that the enormous resources might have a greater long term effect put to someone else and effort was put into finding Mel a school where he had some chance of succeeding. Mel subsequently began some integration into the remedial class in the host school. He managed this well and was delighted with his achievement.

Mel was slowly introduced to an aboriginal school run by the Catholic church. A bus was organised to transport Mel to and from the school. Mel appeared to superficially co-operate with this transition, although the pull to his peers outside school was evident. Mel never consistently attended this school. Shortly after, his parents separated and his life fell into chaos again.

At the time of the follow-up Mel had been sentenced to three months detention in a juvenile remand centre for stealing with violence as one of a gang.

When interviewed he presented as calm and relaxed. He was pleasant, quietly confident, co-operative, and keen to reminisce. He seemed sheepish about his current situation, and quite definite in his acceptance of responsibility for his misdeeds. He expressed annoyance with himself for being a poor role model for his brothers and sisters and making "Mum sad".

When asked about the S.P.E.R. Centre he gave a quick genuine response: "It was the best school I've ever been to.... The teachers there they taught me to read and write. S.P.E.R calmed me down, it take my temper, keep it from running amuck, a good place that school."
He also expressed how "Kids from that school next door used to tease us. We used to give them cheek from the fence. The little room - spose it was to keep my temper from running amuck, looking back it was right to put me there - a good school." He appeared to enjoy reminiscing particularly about the camps, "Rotto, ha! That was allright. Ain't been there again."

The Education Officer at the remand centre described Mel as much calmer than on his previous stay. He is well respected and liked by other inmates. He does have a drug problem. His school work is generally at a middle primary level but he seems keen to learn. He was currently enrolled in an adult education course by correspondence.

2. Dion

Seven year old Dion was a part Burmese boy of superior intelligence. He exhibited bizarre behaviours at school, his ideas were scattered, and he presented with low self esteem. He was aggressive, kicking, and hitting his peers. He refused to speak in class, was very clumsy, and would habitually flail his arms and gesticulate.

Mr D. attended the initial interview. He was a single parent. He presented as overweight, wearing clean but ill-fitting clothes and was barefooted. He mumbled quietly in response to initial greetings and preferred to use gestures than words to communicate. When he did speak he frequently used the word "thing" in place of appropriate nouns.
He explained that he drove a taxi although this work was unreliable and infrequent. He saw the reason for this as being due to his responsibilities as a parent. He spent considerable time outlining his poor financial situation

and of his plans for diet and exercise. Mr D felt Dion's problems stemmed from his mother's desertion and recent changes of school.

Dion presented as a very eccentric young boy. He was overweight and dressed in brightly coloured men's clothing belted in and rolled up. He responded in monosyllabic "baby talk" to any invitation to talk, and would flail his arms, and puff out his lips and cheeks. He shuffled rather than walked with his arms folded, and head down, and appeared not to see obvious obstacles, bumping into doors, chairs, and desks. When asked if he required help to walk he replied "Blind!" When taken to visit the classroom the other children in the centre responded to him as an object of curiosity and amazement.

Dion's history of random care giving, regression to infantile behaviours, high intelligence, unwillingness to communicate verbally, and obvious unhappiness suggested play therapy might benefit him. This was conducted regularly for 18 months before major staff changes occurred and it also became necessary for Dion to exit the programme.

Within two sessions, issues of separation and sibling rivalry emerged and continued over the course of therapy. Dion then regressed to being a baby, building towers up and knocking them down and cooing and gooing throughout. Dion alternated between baby play and two year old play. When upset he would curl up in foetal position and ask for a bottle of milk. The therapist spent considerable time reading his body language, reflecting it to him and putting words to the feelings he displayed. He sometimes worked through cars, feeding a baby car, water, petrol oil, and milk. At times he alternated becoming the mechanic who fixed the engines. He would spend some time deciding if they were worth fixing or not but inevitably decided they were.

Whenever outside anxieties existed such as impending separation from the centre through integration, Dion would regress to an infant. Considerable work was done around how there would be a final separation from this centre but

it would happen when he'd grown up and it would be manageable. At one point Dion commented on how he was "Nought, when I came here, then one, and now I'm two." He later began to play more at a three year old level, using a fire engine and it's ladder as his "biggest weapon" and involving cars in considerable banging and crashing. Several of Dion's birthdays were held in the therapy room.

Dion also worked on practical issues such as his father's selection of clothes for him, the type of food his father cooked, the people who stayed in his house frequently, and his home itself. He set up his own house which was quite different to his father's but was very vulnerable and uncertain in this managing to do so only with protection. He showed an extremely strong bond to his father. Dion worked on the different aspects of himself via the cars. There was a cheeky, fun car, one that could go where no others could, another with a second skin, and one with power.

Staff cared for Dion at a very basic level. He was taught to shower himself with soap, to clean his teeth, wash his hair, and to make sandwiches. It was difficult to have Dion take responsibility for his personal hygiene. He relied overly on his father and others about him to feed and clothe him appropriately as would a toddler. His eating habits were a concern; he would eat only white food e.g. chips, bread, butter, rice, and cheese.

It was noticeable that Dion's behaviour was tied to the level of care he received at home. On days he arrived late looking dishevelled and unkempt and without having eaten he was easily frustrated and he had trouble fitting in with his peers. On days he was well dressed and clean he would be bouyant and a delight to be around. Social workers were called on to help with the type of care given to Dion at home. However Mr D. whilst acknowledging the problems and asking for guidance remained resistant to change. Dion continued to sleep at different houses throughout the week and it was difficult to establish any routine for him.

Camps and outings became an important part of Dion's

education, opening him to alternative ways of living and new experiences. On these occasions Dion would display an extremely affectionate and good humoured nature. Staff noted that many of Dion's mannerisms were those of his father and also his grandfather.

Through small group discussion Dion allowed staff to see his vulnerable self. He was very shy, often feeling his peers were staring and laughing at him. He would respond to this with quite creative "silly" behaviours and coupled with his ill fitting clothes and unkempt appearance created a vicious circle exacerbating this.

Dion exited after three years in the centre. He continued to present as an individual with some rather eccentric behaviours. These presented most often when he was shy, feeling inadequate, or unwilling to comply with his teacher's requests. How well he socialised with his peers was tied to the level of care he received at home and how well presented he felt himself to be. Academically Dion enjoyed all forms of intellectual extension particularly word games, computer oriented activities, and mathematical games. His creative writing via a word processor was outstanding but illegible if hand-written. He required clear limits and positive reinforcement in order to curb his sometimes loud and silly behaviours in the classroom. Dion still suffered separations badly and when vulnerable would regress to immature behaviours.

A social worker, school health nurse, and school psychologist were linked to Mr D. and Dion on his exit from the programme.

At follow-up Dion was not at all positive about his current school experiences saying "School? Hate it." He didn't have any friends and would retreat to the library at break times. The only people he vaguely socialised with were those from the S.P.E.R. Centre who also attended his school. In response to questions about his experiences at the S.P.E.R. Centre he replied " Had more chances to do the things I'm good at there, like spelling, maths, computer. Here you can only do things like electronics in year nine." He thought the S.P.E.R. Centre helped him "a

little... I got better at maths and computer and I liked the teachers. It was rotten in the small yard (playground) and being locked up in a small room (time out). It was okay for when you were really angry."

Data collection

Variables

Child Scale B.

Two teachers in the boy's referring school were asked to complete the child scale B after the child had been accepted into the programme. It was felt being asked to do this later rather than at the time of referral would eliminate bias brought on by teachers exaggerating the behavioural deficits and excesses of boys they wished removed from their class. Once in the programme teachers and assistants were all independently asked to complete these checklists at six month intervals. When boys were ready to exit the programme, two teachers from the regular school who had been involved with their integration and thus knew them well, were asked to also complete the checklists. Again at follow-up two teachers who knew the boys well were asked to independently complete the checklists.

The researcher was consistently available to every teacher making a rating to answer queries and to explain the use of the instrument. Where there were differences in judgement on questions in the schedule they were resolved by the random selection of one of the two ratings.

Zimet, Farley, and Dahleem (1984) studied the reliability of changes found in school behaviour ratings by teachers in different settings. Their results clearly indicated that school behaviour ratings made on emotionally disturbed children across teachers with very different frames of reference and from very different classroom settings did not differ significantly. They conclude that such measures provide an acceptable index of behaviour change.

Age.

The boy's age at the time of his first day in the centre was recorded at entrance. It was rounded to the nearest month.

Intelligence.

The Wechsler Intelligence Scales For Children-Revised (Wechsler, 1974) were routinely administered by school psychologists referring to the centre. The Verbal, Performance and Full Scale IQ scores from each boy's profile was recorded.

Nationality.

The boy's nationality was recorded as part of a detailed social and developmental history on referral to the centre.

<u>Problem type</u>.

The school psychologist and centre staff rated the nature of the presenting problem from referral and intake information in collaboration with the referring school psychologist.

<u>Problem severity</u>.

The psychologist in charge and centre staff described the severity of the child's behaviour at entry and again at exit from referral reports and observations both in his referring school and in the centre. At follow-up the severity was rated by the school psychologist, and teachers from the boy's current school as well as the psychologist in charge. The entry and exit descriptions of severity were retrospectively reorganised using Baenen's (1983) 10-point scale as outlined previously.

<u>Pre-referral and post programme assistance</u>.

This information came from the intake and follow-up interviews with parents and child. They were coded numerically and recorded on the following five point categorical scale:

1 = School psychological service only

2 = Mental health outpatient clinic

3 = Department for social services

4 = A combination of services

5 = none.

Reading achievement.

The Neale Analysis of Reading Ability-revised (second edition) (Neale, M.D., 1988) was routinely given as part of the intake assessment and on exit from the centre by the boys teachers.

Child living situation.

The nature of the boys living situation was recorded as part of the intake interview at entry and was recorded for the exit report on completion of the programme. The school psychologist ascertained the situation at follow-up as part of the interview at this time. Seven scenarios covered all situations and these were categorised as follows:

1 = nuclear family

2 = one-parent home

3 = blended family

4 = extended family

5 = residential care

6 = D.C.S group hostel

7 = foster home.

Family disturbance.

The psychologist-in-charge and referring school psychologist described the intensity and type of family disturbance at entry. At exit the psychologist in charge described the situation. At follow-up the school psychologist at the boy's current school as well as the psychologist-in-charge made these ratings. The entry and

exit descriptions were retrospectively rated using the rating scale used by Baenen (1983).

Family involvement during the programme.

The psychologist-in-charge rated the degree of parent involvement based on the degree of their support of and follow through of staff recommendations from notes made throughout treatment. The Baenen rating method was used (Baenen, 1983).

Treatment length.

The number of months boys spent in the programme excluding regular school vacation times was calculated from the date of entry to their exit.

Nature of Exit.

The school psychologist and centre staff all rated the nature of each boy's exit. Generally boys were either rated as an approved exit or an unapproved exit. The categories were:

1. Approved to school, no special arrangements considered necessary.
2. Approved to other programme, such as educational support unit.
3. Approved to school, support considered desirable. In such cases the psychologist-in-charge would approach the school psychologist at the boy's new school to discuss the nature of the support he might require.

4. Unapproved-parent decision. This included those boys who were withdrawn from the programme prematurely due to a decision on the part of their parents.
5. Unapproved-child problem. When a boy did not appear to be benefiting from the programme due to the intransigent nature of his behaviour after concerted efforts on the part of centre staff, it was sometimes necessary to exit him to make place for another on the waiting list.
6. Unapproved-age problem. When a boy was not considered ready for exit but was required by law to move to high school.

Follow-up interviews

These were conducted by the psychologist-in-charge. The parent interviews were all conducted in the parents homes and the boys were interviewed wherever it seemed most conducive to a positive interview atmosphere. For example on one occasion the interviewer had arranged with the boy, his parents, and the school to interview him at school, however when the interviewer arrived he was in detention and very angry with the school. This interview was postponed to a later date and conducted at home. On two occasions the interview was conducted in a locked room in a remand centre. Those boys who were not attending school were interviewed at home.

Research Questions

It is anticipated the preceding method will enable these research questions to be answered and discussed in meaningful ways.

Research Question 1

Does participation in a S.P.E.R. Centre programme have an effect on behaviour as measured at exit by the Rutter Child Scale B?

Research Question 2

Is there a difference between exit and follow-up behaviour as measured by the Rutter Child Scale B?

Research Question 3

What characteristics are related to positive programme outcome? Specifically what effects on outcome do the following variables have:

Age
Intelligence
Reading Achievement
Type of Problem
Severity of the problem
Length of treatment?

Research Question 4

Does participation in an insight oriented therapy programme have any effect on behaviour as measured by the Rutter Child Scale B?

Chapter 4

Results

Results of the study are reported in this chapter which is divided into three sections. The first section reports descriptive statistics for the child and family variables at entrance, exit, and follow-up. The second section reports the results of repeated measures ANOVA's and multiple regression analyses on the main outcome variable, A Children's Behaviour Questionnaire for Completion by Teachers (Child Scale B - Rutter, 1967). The final section reports on the interviews conducted at the time of the follow-up.

The SAS statistics package and CSS:Statistica for personal computers were used for all the statistical analyses and an alpha level of .05 was used throughout. There was a possibility that the assumptions of normality and homogeneity of variance required for *t*-test analyses might be violated due to the small sample size and uneven samples. In order to minimise the Type 1 error rate Mann-Whitney statistical analyses were also performed. Only the *t*-Test results are reported since they were all corroborated by the Mann-Whitney calculations.

In reporting the statistics, figures are given for the total sample and also for both the therapy and non-therapy treatment groups.

Descriptive Statistics

Age

The mean ages for the total sample and for the therapy and non-therapy groups at entry, exit, and follow-up are reported in Table 1.

Table 1

Descriptive Statistics for Age as a Function of Stage and Group

	Total Sample	Therapy	Non-therapy	*t*
Age at Entry (months)				
M	100.2	100.4	100.1	.04
SD	21.5	21.2	20.8	
n	24	9	15	
Age at Exit (months)				
M	125.0	129.7	120.8	1.10
SD	19.4	14.1	5.5	
n	24	9	15	
Age at Follow-up (months)				
M	170.0	172.1	166.8	.46
SD	27.3	22.7	30.1	
n	24	9	15	

$^{*}p < .05$

The boys were on average eight years four months on entrance to the programme, ten years five months when they left the centre, and 14 years of age at the time of follow-up. The differences in mean ages between the therapy and non-therapy groups were not statistically significant at any stage as indicated by the non-significant *t*-test scores.

The frequencies for various age categories over the total sample are reported in Table 2.

Table 2

Frequency Distribution for Categories of Age Group as a Function of Stage

Age Category	Entry		Exit		Follow-up	
	n	%	*n*	%	*n*	%
less than 72 months	4	16.6	0		0	
73-96 months	7	29.1	1	4.2	0	
97-120 months	8	33.3	11	45.8	1	4.2
121-144 months	5	20.8	7	29.1	3	12.5
145-167 months	0		5	20.8	9	37.5
167-192 months	0		0		4	16.6
over 192 months	0		0		7	29.1

Intelligence

The mean full scale IQ scores as measured on The Wechsler Intelligence Scales for Children-Revised (Wechsler, 1974) for the total sample and both groups on referral to the programme are reported in Table 3.

Table 3

Descriptive Statistics for Intelligence as a Function of Group

	Total Sample	Therapy	Non-therapy	*t*
M	101.3	101.3	102.0	-.095
SD	16.8	14.7	17.6	
n	24	9	15	

*$p < .05$

In many studies of children with emotional and behavioural disorders the average measured intelligence falls in the below average range. One of the guidelines for referral to the centre in this study was that the child be at least near average intelligence. Where possible this was adhered to however, a difficulty that emerges in practice is that children who are not functioning well will not always perform to the best of their ability in the test situation. There were several children in this study, e.g. Mel, Joel, whose measured intelligence score was questionable.

There was no significant difference between the therapy and non-therapy groups on the IQ measure. The frequencies for the IQ categories were as follows: Below average 8(33.3%), average 8(33.3%), high average 4(16.6%), superior 4(16.6%).

Nationality

The total sample was composed of:

13 (54.2%) White Australian

5 (20.8%) English

6 (25%) Minority groups

The minority groups represented in the sample included; Aborigine, Burmese, Yugoslav, Egyptian, Scot, New Zealander, Italian. This diverse population is similar to that in other studies of psychoeducational centres (Zimet et al., 1980; Friedman & Quick, 1983).

Problem Type

The types of behaviour problem manifested by the participants are reported in Table 4.

Table 4

Problem Type as a Function of Group

	Total Sample		Therapy		Non-therapy	
	n	%	n	%	n	%
Acting out	11	45.8	1	11.1	10	66.7
Socialised Delinquent	2	8.3	0		2	13.3
Withdrawn	2	8.3	1	11.1	1	6.7
Immature	1	4.2	1	11.1	0	
Mixed	8	33.3	6	66.7	2	13.3

*p < .05

To obtain satisfactory cell sizes the problem types were collapsed into two categories: Acting out/Socialised delinquent and the Mixed/Withdrawn/Immature disorders. A Chi square analysis revealed a significant difference in problem type between the groups: $X^2(1) = 5.92$, $p < .05$. This difference is to be expected since, as discussed in the chapter on method, the therapy and non-therapy groups were selected for the appropriate treatment according to their problem type.

Problem Severity

The mean staff ratings for problem severity as a function of group and stage are summarised in Table 5.

Table 5

Problem Severity as a Function of Group and Stage

	Total Sample	Therapy	Non-therapy	*t*
Entry				
M	7.1	7.6	6.8	1.36
SD	1.2	0.7	1.4	
n	24	9	15	
Exit				
M	4.9	4.7	5.3	-1.10
SD	1.3	1.2	1.5	
n	24	9	15	
Follow-up				
M	5.2	4.7	5.7	-1.38
SD	1.8	1.6	1.9	
n	24	9	15	

Note. Ratings were made on a ten point scale, with 1 indicating no disturbance; 3 indicating mild disturbance; 5 indicating moderate disturbance; 7 indicating severe disturbance; 9 indicating profound disturbance.

There were no significant differences between the therapy and non-therapy groups at any of the three stages. There were differences in problem severity, as expected, across the stages through entry to exit and to follow-up. These are reported in Table 6.

Table 6

Dependent t-Test Results for Problem Severity by Stage.

Source	t
entry (M = 7.1) to exit (M = 4.9)	9.40*
exit (M = 4.9) to follow-up (M = 5.2)	-2.12*
entry (M = 7.1) to follow-up (M = 5.2)	5.18*

*$p < .05$

At entry staff ratings of problem severity for the total group corresponded to the "severe" category; by exit they had improved to be in the mild to moderate range. The change at follow-up appears small but tested as statistically significant indicating there had been some regression towards the moderate-to-severe range.

Services used prior to referral to the S.P.E.R. Centre

All the boys were referred through the School Psychological Service. The pattern of intervention prior to enrolment in this programme and assistance after exiting from the S.P.E.R. Centre is reported in Table 7.

Table 7

Frequency Distribution of Alternative Agency Involvement

	Previous Services		Post Programme Assistance	
	n	%	n	%
Total Sample				
School Psych. Service Only	12	50.0	6	27.2
Mental Health Outpatient Clinic	2	8.3	4	18.8
Department for Community Welfare	1	4.2	5	22.7
Combination	9	37.5	4	18.8
None	0		3	13.6
Therapy Group				
School Psych. Service Only	4	44.4	3	33.3
Mental Health Outpatient Clinics	1	11.1	1	11.1
Department for Community Welfare	0		2	22.2
Combination	4	44.4	1	11.1
None	0		2	22.2
Non-therapy Group				
School Psych. Service Only	7	46.7	3	23.1
Mental Health Outpatient Clinics	1	6.7	3	23.1
Department for Community Welfare	1	6.7	3	23.1
Combination	5	33.3	3	23.1
None	1	6.7	1	7.7

In order to compare frequencies for therapy and non-therapy groups chi-square analyses were performed using two categories: school psychology services; all other services. Neither analysis was significant: Previous services, X^2 (1)=.01, p >.05; Post programme assistance, X^2 (1)=.28, p >.05.

These results indicate there were no significant differences between groups in the type of agency involvement. Before entering the centre it appears that about half the boys received school psychological services only and half received assistance from the other helping agencies listed as well. At follow-up it appears that more

families were functioning without any assistance. There was less involvement with the school psychological service and more with the Department of Community Services. Of those seeking post programme assistance six had continued to receive assistance from the Department of Community Services at the time of follow-up.

Reading Achievement

The mean reading comprehension stanines for the total sample and treatment groups at entrance to the centre and on exit are reported in Table 8.

Table 8

Descriptive Statistics for Reading Achievement as a Function of Group.

	Total Sample	Therapy	Non-therapy	*t*
Entry				
M	4.15	4.86	3.76	1.02
SD	2.27	2.19	2.31	
n	20	7	13	
Exit				
M	4.59	5.11	4.23	1.04
SD	1.94	1.96	1.92	
n	22	9	13	

*$p < .05$

As indicated in Table 8 there was no significant difference between the groups. A dependent $\underline{t}$ test performed on reading achievement scores for the total sample at entrance ($\underline{M}$ = 4.15) and on exit ($\underline{M}$ = 4.59) also revealed no significant difference: $\underline{t}$ (20) = 1.68, $\underline{p}$ >.05.

It would appear from this result that the boys reading education did not suffer in any way from attending the centre. They generally entered the centre reading at a level one stanine below the mean for children their age and left reading at a level half a stanine below the mean. Although no improvement is statistically apparent, the results show that the boys were actually keeping pace with their year level. Since many of the boys had been under-achieving before entering the centre this actually represents a healthy learning situation.

Child Living Situation

The living situation of the boys in the programme, at entry, exit, and at follow-up is reported in Table 9.

From this table it is apparent that over the course of the programme 10(41.7%) of the boys had experienced a change in their family structure. By follow-up 12(50.0%) had experienced a change in living situation, many of these more than once. This is in keeping with other research which indicates that generally children with adjustment problems in school are having to cope with major structural changes in their living situation at home, a situation which adversely affects their self concept and adjustment (Baenen, & Glenwick et al., 1986).

Table 9

Frequency Distribution of Child Living Situation as a Function of Stage and Group.

	Entry		Exit		Follow-up	
	n	%	n	%	n	%
Total Sample						
Nuclear Family	11	45.8	8	33.3	8	33.3
One-parent home	7	29.2	10	41.7	6	25.0
Blended family	3	12.5	5	20.8	7	29.2
Extended family	3	12.5	0		0	
Residential care	0		1	4.2	0	
Group hostel	0		0		2	8.3
Foster home	0		0		1	4.2
Therapy Group						
Nuclear Family	6	66.6	5	55.5	5	55.5
One-parent home	0		3	33.3	1	11.1
Blended family	2	22.2	1	11.1	2	22.2
Extended family	1	11.1	0		0	
Residential care	0		0		0	
Group hostel	0		0		1	11.1
Foster home	0		0		0	
Non-therapy Group						
Nuclear Family	5	33.3	3	20.0	3	20.0
One-parent home	7	46.7	7	46.7	5	33.3
Blended family	1	6.7	4	26.7	5	33.3
Extended family	2	13.3	0		0	
Residential care	0		1	6.7	0	
Group hostel	0		0		1	6.7
Foster home	0		0		1	6.7

In order to compare the frequencies for the entrance, exit and follow-up stages, chi square analyses were performed using two categories: nuclear family and all others. None of the analyses were significant: Entrance, X^2 (1) = 2.52 $p > .05$; Exit, X^2 (1) = 3.20, $p > .05$; Follow-up, X^2 (1) = 3.20, $p > .05$.

Family Disturbance

The mean ratings of family disturbance are shown in Table 10.

Table 10

Family Disturbance as a Function of Stage and Group

	Total Sample	Therapy	Non-therapy	t
Entry				
M	3.2	3.0	3.4	-1.61
SD	0.6	0.7	0.5	
n	24	9	15	
Exit				
M	2.9	2.6	3.2	-1.51
SD	0.9	0.9	0.9	
n	24	9	15	
Follow-up				
M	2.5	2.3	2.7	-.95
SD	0.8	0.7	0.9	
n	24	9	15	

$^{*}p < .05$

Note. The following four point scale was used to rate family disturbance: 1 indicates no disturbance; 2 indicates mild disturbance; 3 indicates moderate disturbance; 4 indicates severe disturbance.

Although there were no statistical differences over the time of the study, it can be seen that the families steadily improved in their functioning. On entry to the programme the mean rating of family disturbance

corresponded to the moderate-severe range of the scale, by exit and at follow-up the families were less disturbed with mean ratings falling in the mild-moderate range.

Family Involvement

Descriptive statistics for this variable are presented in Table 11.

Table 11

Family Involvement as a Function of Group

	Total Sample	Therapy	Non-therapy	*t*
M	2.3	2.3	2.3	0.00
SD	0.2	0.9	0.9	
n	24	9	15	

* $p < .05$.

Note. Family involvement was rated on a four point scale as follows: 1 = very co-operative; 2 = mildly co-operative; 3 = indifferent; 4 = antagonistic.

Although there was a range of co-operation and involvement on the part of the boy's parents, the average degree of co-operation was only "somewhat involved". It might have been expected that the parents of boys receiving therapy would be more involved than those not receiving this extra attention, but no differences were found between the groups.

Duration of treatment

The mean duration of treatment for the various groups, excluding vacations, is summarised in Table 12.

Table 12

Treatment Length as a Function of Group

	Total Sample	Therapy	Non-therapy	*t*
M (months)	18.2	21.3	16.3	2.40*
SD (months)	5.5	4.8	5.0	
n	24	9	15	

*$p < .05$

The difference between groups was significant, the therapy group tending to stay longer in the programme than the non-therapy group. It seems that those for whom therapy was appropriate required more time in the centre before being considered ready for exit. There is a considerable body of research that discusses how therapy dealing with underlying issues is more time consuming than that which focuses on overt behaviours only (Cross and Slee, 1988). Indeed this is often used as an argument by policy makers who must concern themselves with economics for utilising behavioural modification therapies.

Nature of Exit

Where the boys exited to as well as the nature of their exit are summarised in Table 13.

Table 13

Frequency Distribution for the Nature of Exit as a Function of Group

	Total Sample		Therapy		Non-therapy	
	n	%	n	%	n	%
Staff approved to school	7	29.2	3	30.0	4	26.7
Staff approved to other programme	4	16.6	2	20	2	13.3
Staff approved to school -support	6	25.0	3	30.0	3	20.0
Staff unapproved-parent decision	1	4.2	1	10.0	0	
Staff unapproved child problem	4	16.6	0		4	26.7
Staff unapproved-age requirement	2	8.3	1	10.0	1	6.7

Staff approval and disapproval categories were collapsed in order to compare frequencies and have appropriate cell sizes. The $X^2 = 2.27$, $p > .05$ indicating no significant differences between the therapy and non-therapy groups on this measure.

This is one of the dominant criteria used to measure programme effectiveness in the literature. By this criteria, the programmes used in this centre were generally successful with 70.8% of boys exiting with the

approval of staff. When examined according to treatment group 80% of those boys who were deemed suited to therapy and who received therapy improved, and 60% of those in the non-therapy group also improved.

Measures Taken at Follow-Up Only

Adjustment Rating of Students Social Behaviour by their Teachers.

As well as the standardised questionnaire used in this study teachers were asked in the follow-up interview to rate the social adjustment of the children on a four point scale: 1 indicating they were well adjusted and accepted in their peer group; 2 indicating a reasonable level of adjustment; 3 indicating they were managing but had some problems; 4 indicating a poor level of social adjustment.

The adjustment ratings made by teachers are reported in Table 14.

Table 14

Adjustment Ratings as a Function of Group.

	Total sample	Therapy	Non-therapy	*t*
M	3.26	3.0	3.53	-1.27
SD	1.01	1.11	.91	
n	22	9	15	

* $p < .05$

The majority of children were rated as managing but still presenting with some problems or as poorly adjusted. There was no significant difference between the therapy and non-therapy groups.

Child Scale -A.

At follow-up parents were also asked to rate their children on the behavioural checklist known as the Child Scale A. Scores of 13 or more designate a behavioural disorder (Rutter, et al., 1970, p 412). The mean scores for the various groups on this questionnaire are reported in Table 15.

Table 15

Scores on Child Scale A as a Function of Group

	Total sample	Therapy	Non-therapy	*t*
M	18.35	21.75	15.33	1.90*
SD	7.49	8.36	5.40	
n	17	8	9	
n < 13	6	2	4	

*$p < .05$.

The results indicate there was a significant difference in the parents perceptions of their child's behaviour at follow-up. Parents of those boys in the non-therapy group tended to view their children as better

behaved than the parents of boys who received the therapy. Indeed 44% of parents of boys in the non-therapy group felt their boys exhibited no behavioural disorder as measured by the Child Scale A, whereas only 25% of parents of boys who received therapy felt this way.

Repeated Measures and Multiple Regression Analyses on Child Scale-B Outcome Variables

As detailed in the method the main outcome measure used in this study was a behavioural checklist completed by teachers (Rutter, 1967). A score of 9 or more on this checklist designates a behavioural disorder. The mean scores across all stages are reported in Table 16.

Table 16.

Mean Scores on Child Scale B as a Function of Group and Stage

	Referral	Entry	Six month	Twelve month	Exit	Follow up
Total sample						
M	**21.9**	**16.0**	**14.9**	**12.6**	**11.8**	**13.5**
SD	4.4	5.3	5.2	5.8	6.8	8.2
n	20	19	19	19	20	20
n < 9	0	1	2	5	4	3
Therapy						
M	**22.1**	**15.3**	**15.1**	**13.5**	**9.6**	**11.4**
SD	2.9	4.3	4.0	4.7	3.6	5.9
n	8	7	7	8	8	9
n < 9	0	0	0	1	3	2
Non-therapy						
M	**21.8**	**16.5**	**14.8**	**11.9**	**14.6**	**15.5**
SD	5.3	5.9	5.9	6.7	7.2	8.9
n	12	12	12	11	11	11
n < 9	0	1	2	4	2	1

Child Scale B Scores as a Function of Group.

A Repeated Measures ANOVA was performed on the Child Scale B scores, with group and stage the independent variables. There were two levels of group: therapy and non-therapy. There were six levels of stage: referral, entry, six months, twelve months, exit and follow-up. Only complete data sets were used and one outlier (see Case Mel in Appendix A) was eliminated from the analysis reducing N to 17.

Because the assumption of homogeneity of covariance was likely to be violated, probabilities based on the Greenhouse-Geisser-Imhof (G-G) and Huyndt-Feldt (H-F) adjustments are reported to indicate a more honest Type 1 error rate (Tabachnick & Fidell, 1989, p. 470-471).

The scores are shown in Figure 1.

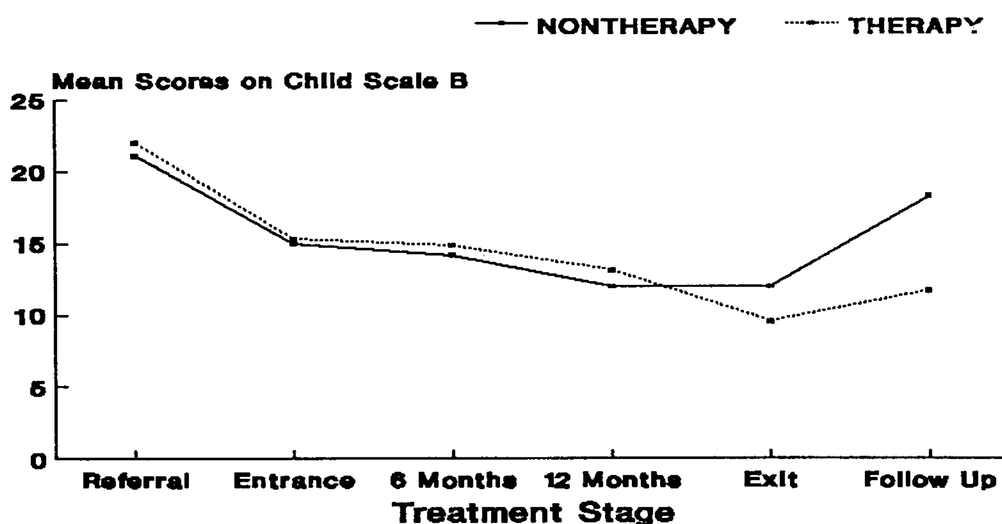

Figure 1.

Mean scores for Treatment Stages as a function of Group.

The stages and interaction effects were significant: stages $\underline{F}(5,75) = 15.03$, $\underline{p} < .05$, (G-G, H-F < .05); stages by group interaction $\underline{F}(5,75) = 2.58$, $\underline{p} < .05$, (G-G, H-F <.05). The interaction indicates that the overall difference across the stages was not the same for each group. The main effect for group across the various stages was not significant $\underline{F}(1,15) = 0.23$, $\underline{p} > .05$, although univariate ANOVA analyses revealed a significant difference between the groups at follow-up $\underline{F}(1,15) = 4.45$, $\underline{p} < .05$.

In view of the significant interaction, profile contrast analyses between adjacent stages were performed. The results are reported in Table 17.

Table 17

ANOVA of Contrast Variables.

Source	df	SS	MS	F
Change in behaviour from referral to entry				
Stage	1	676.14	676.14	23.57*
Group x Stage	1	1.55	1.55	0.05
Error	15	430.32	28.69	
Change in behaviour from entry to six months				
Stage	1	6.21	6.21	0.16
Group x Stage	1	0.56	0.56	0.01
Error	15	573.31	38.22	
Change in behaviour from six months to 12 months				
Stage	1	63.08	63.08	4.03[a]
Group x Stage	1	0.97	0.97	0.06
Error	15	235.03	15.67	
Change in behaviour from 12 months to exit				
Stage	1	52.52	52.52	2.12
Group x Stage	1	52.52	52.52	2.12
Error	15	371.71	24.78	
Change in behaviour from exit to follow-up				
Stage	1	293.51	293.51	23.80*
Group x Stage	1	71.16	71.16	5.77*
Error	15	184.96	12.33	

* $p < .05$
[a] $p = .0632$

There was a significant improvement in behaviour from referral to entrance and a marginally significant improvement between scores at six months and those at twelve months. These improvements were the same for both groups. Figure 1 suggests an interaction between scores at twelve months and exit, however this was not statistically significant, nor was the overall difference between these stages. Although there was a significant decline in behaviour between exit and follow-up this was not the same for the two groups, and it is apparent from Figure 1 that the significant deterioration was confined to the non-therapy group.

It was expected that both groups would improve their behaviour from referral to exit and this was corroborated when dependent *t*-tests were performed: therapy group, $t(7) = 5.9$, $p < .01$; non-therapy group, $t(10) = 10.08$, $p < .01$.

It was also important to assess whether each group had changed in behaviour from referral to follow-up, therefore two further dependent *t*-tests were performed. There was a significant improvement for the therapy group, $t(7) = 4.77$, $p < .01$, indicating that this group had improved in behaviour as measured by the Child Scale B over this time. However, there was no significant difference in scores from referral to follow-up for the non-therapy group, $t(9) = 1.23$, $p > .05$ suggesting that this group had not benefited from attending the centre.

Any interpretation of differences associated with treatment group must be made with caution. Recall from

Table 4 that the therapy and non-therapy groups differed significantly in their composition with regard to problem type. Certain problem types were considered amenable to different treatment approaches and thus boys were selected for one of the two groups. Any results therefore involve a group by problem type confound. It is nonetheless possible to draw meaningful conclusions that acknowledge the role of both variables. For example, the referral to follow-up difference indicates that boys for whom therapy is appropriate, and who receive therapy, show an improvement in behaviour at follow-up. In contrast boys who were not selected for therapy, and received standard (behaviour modification and centre milieu) treatment, did not show any significant improvement at follow-up.

Similar analyses were conducted to investigate changes in the behavioural checklist outcome variable as a function of other independent variables. No differences were found for age, treatment length, or reading achievement. A significance difference was found for intelligence scores and this difference is discussed below.

Child Scale B Scores as a Function of Intelligence

The boys were assigned to one of two IQ groups. The first contained boys whose IQ was greater than or equal to 100, and the second boys whose IQ was less than 100. The dependent variables were the scores at the various stages on the Child Scale B. A univariate repeated measures ANOVA

was performed and again only complete data sets were used and the same outlier was eliminated. The means, standard deviations, and cell sizes are reported in Table 18 and mean scores shown in Figure 2.

Table 18.

Mean Child Scale B Scores for Treatment Stages as a Function of Intelligence

	IQ. > 100			IQ. < 100		
	n	*M*	*SD*	*n*	*M*	*SD*
Referral	9	19.89	4.2	8	23.25	4.5
Entry	9	15.33	4.5	8	14.89	5.2
Six months	9	13.11	5.32	8	16.0	5.2
Twelve months	9	10.67	6.00	8	14.50	6.0
Exit	9	9.22	3.77	8	13.00	5.4
Follow-up	9	12.44	4.27	8	19.12	7.9

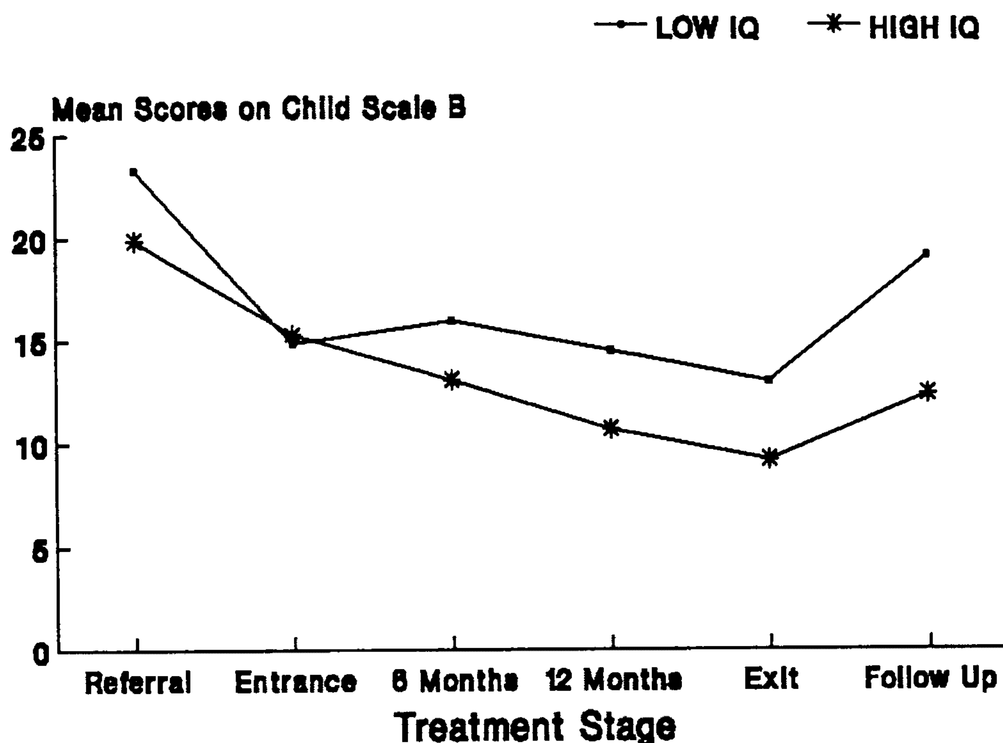

Figure 2

Mean scores for Treatment Stage as a function of IQ Group.

Child Scale B scores were further examined to see if the stage effect was significant $F(5,75) = 14.03$ $p < .05$ (G-G, H-F < 0.05). In this case the interaction was not significant $F(5,75) = 1.42$ $p > .05$, nor was the main effect for IQ group $F(1,15) = 3.19$, $p > .05$.

The influence of IQ was evident when a Repeated Measures ANOVA revealed a significant difference between the groups at follow-up $F(1,15) = 4.80$, $p < .05$. Another indication of its influence was that the higher IQ group

tended to be better behaved on referral and all the way through the programme to their exit and follow-up.

Even though no significant differences were found it is worth noting, especially in view of the small sample size and consequent reduced power of these tests, that the higher IQ group continue to improve from referral to exit. This was not so for the lower IQ group.

When a profile contrast was performed on adjacent stages a significant change in behaviour was found from referral to entry to the programme and from exit to follow-up with no significant difference between IQ groups at any other stage. The profile contrasts are reported in Table 19.

Table 19.

ANOVA of Contrast Variables.

Source	df	SS	MS	F
Change from referral to entry				
Stage	1	708.14	708.14	28.70*
Group x Stage	1	61.78	61.78	2.50
Error	15	370.10	24.67	
Change from entrance to six months				
Stage	1	5.09	5.09	0.15
Group x Stage	1	47.45	47.45	1.35
Error	15	526.43	35.09	
Change from six to twelve months				
Stage	1	65.89	65.89	4.26
Group x Stage	1	3.78	3.78	0.24
Error	15	232.22	15.48	
Change from twelve months to exit				
Stage	1	36.72	36.72	1.30
Group x Stage	1	0.01	0.01	0.00
Error	15	424.22	28.28	
Change from exit to follow-up				
Stage	1	370.04	370.04	25.18*
Group x stage	1	35.69	35.69	2.43
Error	15	220.43	14.69	

* $p < .05$

T-tests were calculated to examine the difference in scores for the two IQ groups both from referral to exit and from referral to follow-up. There were as expected significant differences for both groups from referral to exit indicating improved behaviour as measured by Child Scale B over the time spent in the programme. Dependent *t*-test results were: higher IQ group, $t(9) = 6.316$, $p < .05$; lower IQ group, $t(8) = 6.291$, $p < .05$. From referral to follow-up there was no significant change in behaviour for either IQ group: higher IQ group, $t\ (9) = 3.095$, $p > .05$; lower IQ group $t(8) = 1.710$, $p > .05$, indicating the improved behaviour whilst in the programme had not been maintained at follow-up.

Multiple Regression Analysis

A major aim of the study was to compare the boy's behaviour at exit with their behaviour at follow-up. This analysis was presented in the preceding section. A second major aim was to see if any variables were associated with positive outcomes from the programme. Multiple regression was chosen as the method of analysis. Importantly, this method would also enable an assessment to be made of the significance of the effect for group after taking into account the contribution of other variables.

There were several problems with this approach. One was that the group and problem type were inextricably confounded in that 67% of the therapy group exhibited a "mixed behavioural disorder" and 80% of the non-therapy group were described as either "acting out" or as

"socialised delinquent" (see Table 4). Thus, in any analysis, group and problem type predictor variables would tend to override each other, so that neither would emerge as having a significant unique effect.

However, the small sample size imposed a major restriction on the use of multiple regression. Tabachnick and Fidell (1989, p. 129) recommend a minimum of five cases for each independent variable, therefore any such analysis in the present study was limited to three predictor variables.

The most appropriate predictor variables were chosen on the basis of correlation analyses among eight variables: therapy, entry age, treatment length, entry reading age, IQ, entry severity, problem type, and follow-up scores on the Child Scale B. Table 20 reports the correlations for all these variables.

Table 20

Correlation Between Predictor Variables and Follow-Up Scores on Child Scale B.

Predictor Variable	n	r
Group	19	.43*
Entry age	19	-.54**
Treatment length[a]	19	.07
Reading age	17	-.40
IQ	19	-.42*
Entry severity	19	-.05
Problem type	19	-.46**

*$p < .05$, **$p < .01$.
[a] Although treatment length appeared from Table 11 to be linked to group, after eliminating the outlier and incomplete data sets the dependent t-test was not significant $t(17) = 1.998$, $p > .05$

The four most important predictor variables were group, IQ, entry age, and problem type. The difficulty whereby the group variable was confounded with problem type has already been noted, so a decision was made to eliminate problem type from the analysis. Therefore a multiple regression analysis was performed with behaviour at follow-up as measured by the Child Scale B as the criterion and entry age, IQ, and group as the predictors. Table 21 shows the correlations, unstandardised regression coefficients (B), the standardised regression coefficients

(*B*), the multiple correlations R, R^2, and adjusted R^2.

All three regression coefficients (see below) were significant, indicating that each variable made a significant contribution to predicting the criterion after partialling out the effects of the other variables in the equation.

Table 21

Standard Multiple Regression of Predictor Variables on Follow-up Behaviour Scores

Variables	Follow-up (DV)			
	r	B	*B*	
Group	.43	4.319*	0.325	
Entry age	-.54	-0.181*	-0.552	
IQ	-.42	-0.213*	-0.497	
				R = 0.80
				R^2 = 0.64
			Adjusted	R^2 = 0.57

*$p < .05$.

As expected, both entry age and full scale IQ scores were significant predictors of behaviour at follow-up as measured by the Child Scale B. The older, more intelligent boys fared better. But, after controlling for entry age and IQ, group was still a significant predictor. The therapy group performed better than the non-therapy group

or, more accurately, the therapy group which was composed of boys for whom therapy was appropriate, performed better than the non-therapy group which was composed of boys for whom existing treatments other than therapy, were appropriate. These results lend support to the efficacy of therapy, but they indicate that more effective treatments need to be devised for those boys not selected for therapy. The selection of boys into these groups constitutes a problem already discussed. Further research is needed which would control for this selection factor.

Follow-up Interviews

Parent interviews.

A noticeable feature of the interviews was that parents of boys who received therapy were most enthusiastic about the study. The initial approach by the interviewer was warmly received and there was complete co-operation with the organisation of the interview in all but one case. In this latter case the Community Services officer in charge of the case felt it not in his client's best interests to allow such an interview. With the non-therapy group six were positive and enthusiastic and co-operated, five were positive and enthusiastic but difficult to organise for the interview, one refused permission for the interview, one was in the care of The Department for Community Services and the officer in charge of his case felt it not in the best interests of his client to interview either him or his parents, and two

boys didn't want their parents contacted. A breakdown of responses to interview questions according to treatment group are given below. Parents of eight of the nine boys who received therapy and eleven of the fifteen boys in the non therapy group were contacted.

Question 1. What effects do you think attending the S.P.E.R. Centre had on your child's behaviour and adjustment?

Therapy group - Seven reported positive effects and one reported not much effect.

Non-therapy group - All of them (11) reported positive effects, however three added the qualifier: It was only temporary.

Question 2. What were some of the advantages?

Therapy group	Non-therapy group
Improved behaviour	Improved behaviour
The boys were happier	Small classes
One to one attention	One to one attention
	Improved self esteem
	Loved camps and outings
	Only time he learned
	Taught him to attend

Question 3. What were some of the disadvantages?

Therapy group	Non-therapy group
A fear of stigma	Stigma
He felt different	A reward for misbehaviour
Teasing	Lack of follow-up
Transport	Transport
Lack of support after exit	Too much reward
	Didn't help out of school

Question 4. How satisfactory was your experience with the programme?

Therapy group - Seven reported it was helpful and one reported it to be unsatisfactory.

Non-therapy group - Nine reported it was helpful and two reported it to be "okay".

Question 5. Given the choice again what decisions do you feel you'd make about the problems you were experiencing?

Therapy group - Seven reported they would make a similar decision again and one said a different decision would be made.

Non-therapy group - Eight felt they would repeat their

decision happily and three felt they would decide differently given their time again.

Question 6.- Was your child any different for attending?

Therapy group	Non-therapy group
Positive changes = 7	**Positive changes = 9**
He felt safer	Somehow I stopped worrying
He was happier	He was happier
He knows himself it was good	He was calmer
No change = 1	**No change = 2**
Negative change = 1	**Negative change = 0**
"He wanted to stay home with his father".	

Question 7. What recommendations would you make to improve the S.P.E.R. Centre experience for your child?

Therapy group	Non-therapy group
Staff changes disallowed	Staff changes minimised
There should be more of them	Throw out the good times
There should be more follow-up	Improve the follow-up
Should be able to stay longer	Grade classes
	They shouldn't be fun

Student interviews

Of the boys in the therapy group, seven were interviewed, one returned a written interview schedule since his mother felt it would not be in his best interests to be interviewed directly, and one was not contacted due to the wishes of his Community Services Officer. In the non-therapy group twelve boys were interviewed, one was unavailable and two were refused permission by their guardians.

Question 1. How do you feel about school now?

	Therapy group	Non-therapy group
Positive feelings	3	2
School is "okay"	3	4
Negative feelings	2	3

In the non-therapy group one boy had dropped out of school and had had several labouring jobs. Two boys attended a remand centre school. Since they were unable to reflect on current regular school experiences their responses were not included above.

Question 2 What was it like for you at the S.P.E.R. Centre?

	Therapy group	Non-therapy group
Generally good	4	6
Okay	2	5
Ambiguous	1	0
Not too good	1	1

Question 3 What were some of the good things about the S.P.E.R. Centre?

Therapy group	Non-therapy group
The camps	The camps
The computers	The computers
The outings	The outings
The teachers	"Teachers listened"
"Teachers helped in class"	"It took my temper"
"Teachers comforted us"	"It calmed me lots"
"I learned more"	Cricket games
"There was more help"	"Getting integration"
"I didn't have to battle"	

Question 4. What were some of the bad things about the S.P.E.R. Centre?

Therapy group	Non-therapy group
"The time out rooms"	"The time out rooms"
"The small play area if you weren't integrated"	"Teasing from the host school children"
"The other boys".	"Bus trips to school"

Question 5. Do you think attending the S.P.E.R. Centre helped you? If so how?

Therapy group	Non-therapy group
Helpful = 4	**Helpful = 5**
"Made me more confident"	"I stopped fighting"
"It just did"	"Them teachers they taught me to read and write"
"Got my temper under control"	
"Got me a learning attitude	"The teacher's thought I was okay."
"the playroom helped somehow"	
"I got better at computers"	
"I didn't get sent out of class"	
Helped a little = 3	**Helped a little = 5**
Not much help = 1	**Not much help = 1**
Don't know = 0	**Don't know = 3**

Question 6. Do you think having S.P.E.R Centres is a good idea?

	Therapy group	Non-therapy group
Unconditional YES	5	3
Definitely NO	1	1
For some children YES	2	4
Don't know	0	4

In general both the parents and the boys themselves felt the boys had gained from their experiences with the S.P.E.R. Centre programme. The co-operation of most of the parents (79%) and boys (79%) is an indication of the goodwill felt towards the centre, however one must bear in mind that those who were unavailable or not willing to comment may not have been so consistently positive in their attitudes.

The camps, outings, small class sizes, and consistent care of the staff were features recognised as helpful by almost all interviewed. Parents and students reported increased self esteem, feeling happier, learning more, and improved behaviour as common outcomes from the programme. Several parents made the point that the positive effects were temporary and once the boys had left the programme they often regressed to their former behaviour patterns. Suggestions made for improvements to the programme usually revolved around extending the length of treatment to

include the transition to High School and better support for the participants once they had exited the centre. Several of the boys interviewed discussed how they hadn't appreciated the centre whilst they were attending, however looking back on their experiences felt them to be most valuable. Other insightful responses were elicited when asked about the value of S.P.E.R. Centres. Three boys spontaneously discussed how the centre had been of use in helping some children but not everyone. One of these boys made the comment that it "...doesn't work for those rough kids who got in trouble with the police, but for kids like K who wet themselves it was great."

Chapter 5
Discussion

Results of the study are summarised and discussed in this chapter. Findings are compared to the literature and interpreted as to their theoretical and practical implications. Methodological problems are highlighted in a general overview of the study's limitations. Finally, conclusions and directions for further research are presented.

Summary of results

The typical student referred to the S.P.E.R. Centre was an eight year old white male with either a severe acting out disorder or a combination of problems including severe acting out. He was of average intelligence, reading at a level below his chronological age, and with a history of psychological intervention. The families of referred children were mainly intact but moderately to severely disturbed in functioning. The average length of stay in the centre programme was eighteen months after excluding school holidays.

After settling into the programme children were considered for either a combined therapy/behavioural management programme or a behaviour management only programme on the basis of their histories and problem types. Of the therapy group 67% were diagnosed as having a mixed disorder whilst 80% of the non-therapy group were

diagnosed as acting out or socialised delinquent. Results for the two separate treatment groups as well as for the total group were included in analyses.

At exit children overall were rated less disturbed, with teachers rating 25% of them as not manifesting any behavioural disorder. Their reading ability had improved, generally keeping pace with the amount of time spent in school. Families had often changed in structure and were still mild to moderately disturbed in functioning. They had mostly been "somewhat involved" in the programme. Staff approved exit to regular school or special programmes within regular school to 71% of the children.

At follow-up 3-4 years after their exit, 17 (71%) remained in school. They were mostly rated by their teachers as managing but experiencing some problems and were still considered to be moderately disturbed. Only 15% were rated by their teachers as not exhibiting any behavioural disorder. The transition to high school is acknowledged as a stressful time for adolescents. Of the 18 boys now eligible for high school, eleven were attending regularly. Two boys were held in juvenile remand centres, three were attending alternative education courses provided by the Department for Community Services and two boys had left school and were unemployed. Families had continued to change with 50% experiencing some change in living situation by follow-up and many of these had experienced several changes. Whilst the majority of children were involved with other helping agencies on or shortly after exit from the programme, at follow-up 27%

were receiving professional services all from the Department for Community Services.

The two children who were in remand centres at follow-up had both been diagnosed "socialised delinquent" on entry to the programme. Those in other residential placements were all diagnosed as having acting out problems. The only child to progress unnoticed into the high school system by teachers or school personnel had been referred to the S.P.E.R. Centre for withdrawn behaviours. These cases are summarised in Appendix A.

Profile contrasts of Child Scale B scores with treatment group as the independent variable revealed that the two treatment groups did not differ significantly until follow-up. The behaviour of both groups improved whilst they attended the centre and then deteriorated after their exit from the programme. The therapy group were still less behaviourally disordered at follow-up than they were on referral to the centre whereas the non-therapy group showed little difference in behaviour from the time of their referral to the centre to the follow-up.

Profile contrast analysis also indicated that the more intelligent children tended to be less behaviourally disordered throughout the programme and at follow-up.

A multiple regression analysis indicated that the older, more intelligent boys were less behaviourally disordered at follow-up. Whether the boys were in the therapy group or not was also a significant predictor of improved behaviour at follow-up.

Comparison with the Literature

Client populations

The children referred to the S.P.E.R. Centre appear to be similar in age, problem type, intelligence, problem severity, reading achievement, and family characteristics to children described in a variety of other outcome studies of psychoeducational day school programmes (Baenen, Stephens, & Glenwick, 1986; Halpern et al., 1978; Weinstein, 1974; Zimet et al., 1980).

Outcome

The findings of significant gains in behavioural adjustment whilst in the programme, with a 71% rate of approved return to regular school settings are consistent with the conclusions discussed in the review of outcome studies of psychoeducational day school programmes. The observation that the boys despite improvement still continue to have difficulties in social and behavioural adjustment also concurs with the conclusions from these studies. The behavioural results at follow-up are also consistent with the literature. That the boys who received therapy were significantly better behaved several years after leaving the centre, attests to the effectiveness of the programme. Most of these boys exhibited acting out problems with concomitant withdrawn or immature problems resulting in a diagnosis of "mixed disorder". The finding

that the boys whose behaviour problems were mainly acting out, did not maintain their behavioural gains on their return to regular schools is also consistent with the literature (Cross & Slee, 1988; Rutter, 1985; Rutter and Giller, 1984; Kazdin, 1985; Robins, 1986; Robins et al., 1991).

The S.P.E.R. Centre has programme services, a client population, and outcomes similar to those found in previously published research on psychoeducational day school programmes. Thus the characteristics noted to be related to improvement and outcome in this study have implications for other similar programmes. In the following section these factors are discussed.

Age

The boy's age at entry emerged as an important predictor of improved behaviour at follow-up. Older boys experienced greater improvement than younger boys.

The nature of the relationship of this demographic variable to outcome in psychoeducational settings has not been clearly demonstrated in the literature (Kazdin, 1985; Weisz & Weiss, 1989; Stotsky et al., 1974; Prentice-Dunn et al., 1981; Kolvin et al., 1981).

In the present study older boys seemed to benefit more from treatment in the centre. This seems to go counter to intuition. A possible reason for this is that all the children in this study were quite young on entrance to the programme, thus even the older children

might have been considered young in other studies. For example in the Prentice-Dunn et al., (1981) study children were aged six to sixteen. Thus the conclusions here that younger children benefited most may actually be comparable to those of the present study. Another possible explanation might be that the older boys were more able to take advantage of the therapeutic milieu of the centre. They were perhaps more capable of understanding the purpose of the programme and of understanding the complexities of behaviour. They perhaps took more advantage of the programme, talking through their problems with any of the staff and also benefiting from the myriad of experiences offered through the regular outings and camps.

Intelligence

The findings indicate that boys with higher intelligence tended to exhibit less disordered behaviour at referral and all the way through their programme to follow-up, and that intelligence was an important predictor variable of follow-up behaviour.

This is not a surprising result. There is little question that intelligence is related to general life adjustment (Maloney and Ward, 1976). Experience in the centres had led to the development that one of the criteria for entry to the programme be a measured ability level in the normal range. Observations made by staff in the centre were that the more able boys were better placed

to take advantage of all the experiences offered by the centre. The less able boys appeared to make progress but did so more slowly and were dependent on the external consequences provided by the token economy for longer time periods.

Measured intelligence has been found to be positively related to the treatment progress and follow-up status of behaviourally disturbed children placed in psychoeducational day schools (Halpern, et al., 1978). However the literature regarding the relationship between IQ and behavioural outcome in these schools is generally inconsistent (Prentice-Dunn, et al., 1981).

Treatment group

The treatment group the boys were selected into was a significant predictor of behaviour at follow-up. As discussed previously the two groups differed in a major way. The therapy group was comprised of boys with a mixed behavioural disorder, whereas the non-therapy group consisted of boys who were mainly acting out. Thus problem type was confounded with the treatment variable. The two groups on whom the final statistical analyses were performed were otherwise similar on all variables measured in this study.

Boys for whom therapy was appropriate and who received therapy maintained their behavioural improvement beyond their exit from the programme for three to four years. This may be due to having received the extra

attention and input from the therapy sessions and from having the opportunity to work on personal issues at a deeper level than that provided in the general centre programme. These boys may have internalised the positive behavioural and emotional experiences rather than be reliant on external factors to monitor their behaviours. On the other hand it may be a factor with which the type of problem the boys receiving therapy presented with. In all cases there was some degree of inner turbulence underlying the boys' school behaviour. It would appear that when this was addressed and calmed the boys were willing and able to work at modifying their outward behaviours. The information gained from both the boys and their parents in the follow-up interviews suggested that these boys had learned how to work on deep personal issues with a therapist. Had there been this opportunity provided for these boys after their exit from the centre these gains may have been further consolidated.

The boys for whom therapy was not considered appropriate and who worked on their behaviours via the behavioural modification system and milieu of the centre did not maintain their behavioural improvement after exit from the centre. It seemed that they were dependent on the centre staff and external consequences in order to behave appropriately.

The meta-analytic reviews of the literature have tended to support the efficacy of behavioural therapies in preference to the non-behavioural therapies in improving the behaviour of children with emotional and behavioural

problems. There is however, a paucity of studies available which use non-behavioural techniques and no firm conclusions have been reached (Casey & Berman, 1985; Weisz et al., 1987; Kazdin, 1990).

Most research into the treatment of the acting out and socialised delinquent child suggests that they are particularly difficult and intransigent disorders to correct. Although they can readily be altered in a given setting, the results generally do not carry over to different settings (Kazdin, 1985). The results of the present study would concur with the literature on this issue.

Methodological Considerations

In this section, the methodological limitations of the study and their effect on the interpretation of the results are discussed. Issues regarding the data set, research design, and statistical analyses are examined.

Data set

The quality of the data set may be brought into question by the fact that no analyses for reliability were performed for the study specific instruments. Most often ratings were made by a process of consensus involving the centre psychologist and centre staff. The problem type rating and degree of family disturbance also involved collaboration with the referring school psychologist. It must be remembered however that all raters were

professionals trained in working with disturbed youth.

Another limitation was that only a small number of the proposed factors could be analysed for their prognostic value, given the small sample size. The limited number of cases relative to the number of measured variables resulted in the elimination of several variables from the analysis.

The data set may be somewhat biased in that complete data sets were not available for all boys. There was however no pattern apparent in the availability of data.

The perceptions of the boys and their parents were not systematically collected other than at the time of follow-up. The data analysis relies on the teachers' perceptions alone throughout the course of the programme. A standard semi-structured interview schedule administered to parents and students at strategic points in the programme would have provided a more complete assessment of programme impact.

Since this study began Achenbach and his colleagues have developed a questionnaire on child behaviour which uses parallel forms from parents, teachers, direct observers, and older children themselves (Achenbach and Edelbrock, 1983, 1987). Several major studies have suggested it is a very promising research and clinical instrument (Verhulst and Akkerhuis, 1986; Achenbach, Verhulst, Baron, & Akkerhuis, 1986, 1987). Australian replication studies are beginning to bear fruit (Hensley, 1988). Such a battery may be useful in building a profile over time on disturbed children from multiple

perspectives.

Although an attempt was made to assess the impact of the major programme components therapy or no therapy, there are a variety of other features of the programme which may have impacted on outcome and which were not considered. These include the small class size, the camps and outings, and the integration process.

Somewhat related to this is the assumption that all boys were sufficiently exposed to the programme. However there were times when the centre was not running as smoothly as it could be due to such factors as the composition of children in the centre, staff resources, staff dynamics and tensions, and changes of staff. Variations in the efficiency of the programme because of these factors were not examined in the present study nor in any reviewed in the literature.

Research Design and Analyses

A significant methodological inadequacy of the study was a lack of a comparison or control group. There are legal and ethical issues in the treatment of disturbed children which make the establishment of no-treatment controls untenable. In the case of this centre there was never a waiting list of more than two or three children and to use those referred but who never entered the programme would have introduced additional bias. Such a group was also particularly small in the present case.

There is, however, a growing body of evidence which

indicates that children with severe behaviour disorders change little over periods of time ranging up to several years, particularly without intervention (Loeber, 1982; Rutter, 1985; Robins, 1986; Robins et al., 1991; Farrington, Loeber, & Van Kammen, 1990). This implies that those referred to the S.P.E.R. Centre are at high risk to continue their poor adjustment and that their rates of spontaneous remission would be expected to be very low unless they participate in effective therapeutic intervention programmes.

Le Vine and Greer, (1984) discuss how field work which necessitates small sample sizes and lack of control groups, where subjects serve as their own controls, being measured on a number of occasions, "..are gaining acceptance in the scientific literature ...and seem to provide very fruitful grounds for generating hypotheses" (p. 526).

Another major methodological problem with this study was the problem type/treatment group confound. It is not impossible that those boys not selected for therapy may actually have benefited from receiving the therapy. A future study is needed where boys diagnosed "mixed disorder" as well as those diagnosed "acting-out" and "socialised delinquent" receive both forms of treatment.

There were a number of factors not included in the multiple regression analysis due to the small sample size. A study incorporating children from all four S.P.E.R. Centres could perhaps examine the child and family factors discussed in this study as well as others such as socio-

economic status, and self concept.

The multiple regression analysis of factors used in this study does not allow for causal statements regarding factors related to improvement at follow-up. Variables can only be described as relating to rather than being responsible for particular outcomes.

Conclusions and Directions for Further Research.

The findings support several conclusions about the psychoeducational treatment of severely disturbed boys, which are presented in this section.

With respect to the aims outlined in the introductory chapters the following conclusions are possible:

1. Participation in a S.P.E.R. Centre programme for twelve months or more had a positive effect on behaviour as measured at exit by the Rutter Child Scale B.

2. Measurement on the Rutter Child Scale B indicated a general decline in the behaviour of the boys from their exit from the programme to this follow-up three to four years later.

3. Of the various child and family factors examined in this study, age and intelligence showed a significant relationship with positive programme outcome. The older, more intelligent boys generally fared better.

4. Selection for, and participation, in regular weekly therapy sessions, resulted in considerable behavioural improvement as measured by the Rutter Child Scale B. This improvement was still maintained at the time of this follow-up three to four years after the boys exit from the programme.

The programme was effective for both groups in the short term and one group in the long term. This suggests that a special facility withdrawal centre can be a very appropriate environment for correcting the school adjustment problems of some children.

The recidivism of one group and the follow-up opinions of those interviewed suggest that boys with emotional and behavioural problems require long term assistance in order to positively adjust to their environment. It is not enough to provide an intensive therapeutic programme for several years and then leave these boys and their families to make it alone. The outreach work which the S.P.E.R. Centres have implemented recently provides a mechanism whereby these boys can be maintained in the normal school setting. This outreach programme which is essentially based on behavioural principles might not be enough for those boys who benefited from the insight-oriented therapy programme. It should perhaps be considered a useful adjunct to the therapy programme, as a way of supporting these boys after their exit from the withdrawal component of the programme. Burchard and Clarke (1990) discuss a system of

"Individualised Care" which may be better suited to these boys. This involves a total commitment to serve the child and his family on an individualised basis. All resources are made available to follow the child and family until the services are no longer needed. Strategies are presented in their paper to overcome attitudinal and funding barriers to this concept.

The centre described in this study offers one of the most intensive therapeutic programmes available to children with emotional and behavioural problems. There is perhaps room for improvement in the programmes offered and certainly in the after programme care, however it would seem that early preventative work requires attention. It is imperative that school and community services become co-ordinated so that early preventative measures at home, in child rearing practices, as well as pastoral care in schools catch this group of children before the problems compound. Indeed Parent Management Training is recognised as a promising avenue for the treatment of children with the more aggressive behaviours (Kazdin, 1988; Cross & Slee, 1988; Farrington, 1991; Patterson & Narrett, 1990). This is based on the general view that such behaviour is inadvertently developed and maintained in the home by maladaptive parent-child interactions. Treatment in the home situation is thus focused upon. If this is then co-ordinated with treatment in the school there must be a greater likelihood of behavioural improvement being maintained.

The regression of some of the boys at follow up does

not mean that the benefits from attending the S.P.E.R. Centre were minimal. These boys were kept in the school system and off the streets for a significant period of time in their formative years. In the light of the work by Robins (1986) indicating that antisocial behaviour is a deteriorating condition, the months spent attending the S.P.E.R. Centre may be considered as time spent in stabilising their condition.

This study also provides support for the efficacy of insight-oriented therapies in effecting change which is long-lasting. Although both approaches utilised in this study resulted in positive behaviour change whilst the boys were in the centre it was noticeable that only those who had received the additional element of an insight-oriented therapy maintained that change several years later. It is possible that these boys having learned to think about their lives and actions in a deeper way were able to continue this process once they had left therapy, whereas those who had not been trained in this way depended on social reinforcers which are not always consistently forthcoming to maintain their behavioural improvements.

There is a tendency for the community to demand quick and inexpensive rehabilitation programmes for offenders or preventative programmes for potential offenders. There is also a tendency to despair when these fail and to assume rehabilitation is not possible. The results of this study suggests that preventative or rehabilitation programmes must be thorough especially in the phase involving re-

integration to the community. Insight therapies, such as the cognitive behavioural approach, play therapy, and regular counselling should accompany behavioural management strategies.

This study is the first systematic study of any Socio-psychoeducational Resource Centre in this State. Through this research the centre has made itself accountable to itself, it's colleagues and to the public which it serves.

The study has experienced the limitations of field study in a sensitive area. Despite this it has made a meaningful contribution to research on the psychoeducational treatment of children with emotional and behavioural disorders. It indicates that the centre has improvement and outcome similar to other published studies. As well the study has practical applications and theoretical implications regarding childhood behaviour disorders.

The study has generated many questions regarding treatment outcome. Further studies might build on this foundation, systematically varying programme components, treatment conditions, and gathering data from all four centres using recently developed instruments in order to answer the questions raised by this research. The ultimate purpose is to refine and improve the programmes, centre milieu, and staff performance in order to produce long-lasting and significant behavioural improvement and social and emotional adjustment in the children who participate in such programmes.

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APPENDICES

APPENDIX A

Clinical Material*

Case Age Nationality IQ	Diagnosis	Symptoms	Background	Treatment Time	Progress	Nature of Exit	Follow-up. School (S) and parental views.
Alan 5-9 English Average	Mixed Disorder	Acting out- fighting, impulsive Withdrawn- anxious Immature- clumsy	Adopted at 6 wks M:Anxious, fears child, & future. F:Treats child as equal, competes with him. Puts M down. Only child.	C: Therapy, BM . M: Counselled F: Rejected counselling 23 months	Worked on sexual issues, on in integrating good & bad sides. Close bond with teacher. Required calming and soothing.	To host school with support. Continue therapy	S: Anxious, eccentric. Reasonably adjusted. Attends S.H.S. M: Anxious F: Uninvolved
Duncan 8-11 English Low- average	Immature	Withdrawn- fearful, inhibited. Immature- distractible, sluggish, clumsy.	From England age 5 years. Sterile home environment. M: Fearful, belief in supernatural F: Easily led 1 sister(+2yrs)	C: Therapy, BM M & F: Behaviour management 18 months	Main response was fear. World outside his sanctuary was scary. Responded to camps, outings. positively.	To Ed- support unit.	S: Managing but fearful. P: More confident. Some problems with C.
Dion 7-7 Burmese/ Australian Superior	Mixed Disorder	Acting out- Tantrums, aggressive. Withdrawn- silent. Immature - scattered ideas, bizarre gestures.	P:separated 15 mths F: custody at 5 years. Irregular work, uses C as excuse. Gambles. Random care given. Only child.	C: Therapy BM F: Behaviour management. 27 months	Regressed to baby in therapy. Worked on contracts. Behavioural improvement evident. Responded to outings, & consistent care. Social worker involved.	To S.H.S eccentric but intact.	S: Poorly adjusted. Anti-social. Underachieving. F: o.k, some problems.

* Key to abbreviations: C, child; P, parents; M, mother; F, father; GM, grandmother; S.H.S, Senior High School; BM, behaviour modification.

Appendix A (continued)

Case Age Nationality IQ	Diagnosis	Symptoms	Background	Treatment Time	Progress	Nature of Exit	Follow-up School(S) & Parent view.
Bill 6 years Aust. Low- average	Acting Out	Acting out- biting, hitting, kicking, lying.	F left when M pregnant. Two siblings (+2, +3). M never forgiven F. C like F, M very negative to this boy.	C: Therapy BM M: Counselling 26 months	Behaviour modified little. M's attitude unchanged.	Exited to similar programme.	C in care of DCS. Very disruptive, impulsive. Criminal record
Mario 7-11 English/ Italian Low- average	Acting Out	Acting out- aggressive, impulsive, disruptive, minimal work output.	Violent, emotionally ambivalent home life. 1 half sister (+5).	C: Calmed BM M: Counselling Sister also counselled 18 months	Rapid behavioural improvement, also academic and social gains. Litle change in family	To regular primary school.	C in care of DCS. Prepsychotic, Spergers syndrome. Series of foster & residential placements
Clive 8 years Australian High- average	Acting out	Acting out- attention seeking fighting tantrums poor social skills	M never able to manage this child. Divorced when C 3 years C lived with F. Many live-in-housekeepers. 1 stepbrother(+2), 1 sister(-2) living with mother and defacto. M emotionally needy.	C: Behaviour management Social skills training M: uninterested F: B management	Social, behavioural & academic improvement. Coincided with moving to live with M.	To regular primary school.	C in care of DCS. Not attending school.

Appendix A (continued)

Case Age Nationality IQ	Diagnosis	Symptoms	Background	Treatment Time	Progress	Nature of Exit	Follow-up School(S) & Parent view.
Brian 10-4 Australian Superior	Acting Out	Acting out- Truants, Bullies younger children, social isolate underachieving. Withdrawn - depressed.	Jewish. F: Manic Depressive left when C 3 years. M: Highly intelligent, not managing, confused. 1 brother (+2). Previous psych. intervention.	C: Counselling BM M: Counselling Family therapy attempted.	Some progress in academic and behavioural areas. No change to social skills or in family dynamics.	To regular primary school Staff unapproved child problem	Repeating year in S.H.S after avoiding school. Parent refused permission for follow-up
Douglas 10-8 English High-average	Acting Out	Acting out- Fighting, social isolate, stealing, disruptive, rarely completes schoolwork.	C rejected by F. P very poor management skills. 1 sister (+3). Family functioning poor. F gambles, "shady" business deals. M steady nursing work.	C: Counselling BM Family therapy attempted. DCS involved. 12 months	Little change P: uncooperative	To regular primary school Support given. Staff unapproved child problem.	Not attending school. Has had many jobs. Gambles. P see him as irresponsible. Steals w'out remorse
Nick 9 years Australian Low-average	Acting Out	Acting out- Non compliant, aggressive, threatening. Immature- poor achieve,r inattentive.	F: Unemployable pension, M: Cleaning work. 1 sister (+5), 1 brother(-4) no problems. Poor behaviour management skills. F violent with drink.	C: BM P: disinterested	Behavioural improvement	To regular primary school with support.	In Education Support Unit Behaviour containable.

Appendix A (continued)

Case Age Nationality IQ	Diagnosis	Symptoms	Background	Treatment Time	Progress	Nature of Exit	Follow-up School(S) & Parent view.
Ty 8-1 Australian Superior	Acting Out	Acting-out- attention seeking, socially isolated, disobedient, precocious. Immature- uses whining voice,	P: both professional. Separated. F: 20 yrs older than M, Lacks social skills, verbally aggressive. M: Socially aware, realistic & practical.	C: BM Social skills training. M: Support F: Uncooperative Custody sorted out.	C: progress made in behaviour & social skills. Also became more self-aware. M: Confident	Exited to regular primary school in another . State due to M . relocating	Managing well in private school.
Mervin 9-2 English High- Average	Withdrawn	Withdrawn- aloof, secretive depressed, fidgets Passively non-compliant. Immature-daydreams, passive, lacks perseverence.	Stressed marriage Divorce with many financial & legal problems. C: A breathholding baby. M: Emotionally exhausted.	C: BM M: Support Counselling.	C: Improved behaviour. M: Gained confidence stabilised.	Exited to regular primary school.	Well adjusted at S.H.S.
Aaron 5-6 English Low- average	Acting Out	Acting out- Defiant, tantrums, attention seeking. Withdrawn - anxious. Immature - Not ready for formal learning.	Stressed marriage, P separating. M very angry. Tense home environment	C: BM Limit setting Calming. M: Counselling & support. F: Uninvolved.	C: Improved self esteem & behaviour. M: Unchanged	Exited to Regular school with special remedial support	A behaviour problem in the Special Ed Education Unit.

Appendix A (continued)

Case Age Nationality IQ	Diagnosis	Symptoms	Background	Treatment Time	Progress	Nature of Exit	Follow-up School(S) & Parent view.
Charles 7-2 Australian Low-average	Mixed Disorder	Immature- loud voice, awkward, fidgety short attention span. Acting out aggressive. Withdrawn- depressed low confidence.	F: Large frame verbally aggressive M: Concerned, realistic. 1 sister (-2). Some rivalry.	C: BM Remedial teaching Removal of pressure. 19 months	Improved self esteem & Academic skills. Eliminated aggressive behaviours.	To regular primary school in country. P Separated, M & children relocated.	Attends country agricultural school. Some problems academic & attitude.
Raymond 8-3 Egyptian/ English High-average	Acting Out	Acting out- threatening, aggressive, disobediant, impulsive. Immature- inattentive, short attention span	M: second marriage, F: third marriage. Many half siblings. P separated & have both remarried, sharing custody. C: Important eldest son of eldest son. Psychic powers attributed to him. Inconsistent management.	C: BM reality testing P: Counselling 21 months	Improved behaviour, social skills & self esteem. P: somewhat more consistent & practical.	To regular primary school with S.P.E.R.C. support.	Suspended from class. Seen as disruptive class. Socially accepted, well behaved outside.
Albert 5-11 Scottish® Australian Average	Acting Out.	Acting out- Swears, bites, tantrums, defiant. Immature- innattentive, poor concentration.	Considerable tension in household. Over involved paternal grandparents. F: Ineffectual at home successful at work. M: Depressed.	C: BM P: Marital conselling 22 months	C: Responded well to contracts, firm consistent management. Eliminated manipulative, regressed behaviours at. school. Rage & tantrums at home.	Exited to short-term residential setting as school behaviour deteriorated & parents not coping at home.	P. divorcing C. In process of changing schools Generally still major problems.

Appendix A (continued)

Case Age Nationality IQ	Diagnosis	Symptoms	Background	Treatment Time	Progress	Nature of Exit	Follow-up School(S) & Parent view.
Kevin 7 years Australian Low- average.	Mixed Disorder	Acting out- tantrums, disobedient, dishonest, attention seeking. Immature- clumsy. Encopretic.	M: Weary, depressed, concerned. F: Often away, truckdriving. Marital conflict. Rejects son. 2 sisters (+2, -2). Both doted on & demanding.	C: BM M: Counselling, B. Mamagement. F: Attempt to involve. 18 months.	C: Encopresis controllable at school. Happier child. Behaviour improved at school. Remained untidy. Little change at home. P: Little change	Exit to regular. primary school	C: Lonely, depresed. Seepage problem with bowels. Teased by peers. P: Separated. S: Not a likeable child. Many problems
Joel 10-3 Australian Low- average	Withdrawn	Withdrawn- shy, seclusive, friendless. Passively angry, anxious, does not participate in class.	P:Relatively stable, middle class. High expectations for their son. 1 sister (-3)	C: BM Therapy P: Counselling 18 months	C: Expressed much anger & self destruction in therapy. Responded to positive reinforcement. Nervous flushes disappeared.	Exited to regular primary school. Much calmer, confident.	Well adjusted, accepted in local S.H.S. Parents more relaxed, accepting.
Garth 8-8 Australian High- average	Mixed Disorder	Acting out- attention seeking, fighting, defiant, restless, fidgetty. Withdrawn- anxious for approval, friendless, egocentric.	Considerable marital friction. M dominant, puts F down. F powerless, angry outbursts. Both parents have many strained relationships in community. Sister (1+), 2 brothers (-3,-4)	C: BM Therapy Social skills P: Marital therapy Family therapy 19 months	C: Initiated psychodramatic approach. Acted out real problems e.g., sexual role confusion, communications. Family therapy addressed boundaries, communication alignments, executive powers.	Exited to regular school at parents request. Support essential.	Little change in family. P: Consider child difficult. S.H.S.: Child is immature socially, destructive.

Appendix A (continued)

Case Age Nationality IQ	Diagnosis	Symptoms	Background	Treatment Time	Progress	Nature of Exit	Follow-up School(S) & Parent view.
Laurie 9-11 Australian Average	Mixed Disorder	Withdrawn- daydreaming, unhappy, depressed, plays alone. Immature-unmotivated distractible, fidgets Acting-out- "silly"	Only, unplanned child. P: separated when C 2.5 years M: Not maternal. Remarried. Stepfather: ex army, own adult family. Maternal G'parents strong influence.	C: Therapy Remedial Ed. M: Counselling Family counselling. 24 months	C: Used centre resources to the maximum. Made rapid progress. P: Some understanding, achieved. Maternal influence diminished.	To S.H.S. Would continue to require remedial help.	S.H.S: Considered reasonably adjusted P: Consider child and family to be functioning well.
Tony 8-6 English Average	Mixed Disorder	Acting out- unpredictable, explosive outbursts Withdrawn- Hypersensitive, anxious. Immature- sluggish.	Emotionally & physically violent first 4 years. M: Drugged to manage. Stepfather: stable but aggressive and abusive to authority. Doesn't relate well to children. 1 sister (+2)	C: Therapy BM M: Support P: B M training. 25 months	Disturbed, fragmented child. Responded to intense therapy. Worked through many issues, but needed continuing therapy Settled in class P: Some learning and awareness achieved.	To S.H.S. Support needed C: Reluctant to leave.	S: Poorly adjusted. P: Some problems. Family not functioning well.
Selwyn 10-9 New Zealand Average.	Mixed Disorder.	Acting out- non-compliant, bizarre attention seeking, aggressive. Withdrawn - secretive, aloof. Immature- pale, wan, apathetic.	Marital stress. C: Abandoned by M infant. F: History of alcoholism, violence. Puts others down continually. M: Emotionally deprived, empty. 1 sister (-9).	C: Therapy BM M: Support F: Support	Became "alive" in therapy sessions. Became more confident in class. Behaviour managed but character unchanged.	To S.H.S. Exited due to age, Not ready to leave.	S: Not managing F:Died leukaemia. M: Remarried. Many problems.

Appendix A (continued)

Case Age Nationality IQ	Diagnosis	Symptoms	Background	Treatment Time	Progress	Nature of Exit	Follow-up School(S) & Parent view.
Mel [illegible] years Aborigine Low- average	Socialised delinquent	Acting out- fighting, stealing, swearing, truancy, vandalism with others.	C. born M 16 yrs Lived with GM until 18 mths. 5 siblings unsettled life, alcoholism, unemployment.	C: BM Containment. P: Behaviour management Trust an issue. 16 months.	Better behaved in centre Respected limits, and staff. Ran riot in community. Peer influence strong.	Superficial cooperation to attend Aboriginal school.	Remand Centre. S: Well accepted. P: Good when at home.
Stan 11-2 Aust. Low- average	Socialised delinquent	Acting out- aggressive, truant, disobediant, swearing, vandalism with others.	F: unemployed M: consistent menial work 1 sister, 3 step brothers (+6Yrs)	C: BM Containment. P:limit setting. Uninvolved. 13 months	Behaviour in centre plateaued. Reasonably cooperative Pull from peers strong.	Unapproved Exit to regular school.	Remand Centre S: Poorly adjusted. P: Worried re drugtaking.
Simon 10 years Yugoslav/ Australian. Average	Acting Out	Acting out- aggressive, threatening, attention seeking. Immature- Self-centred.	M: Deserted when infant. F/son: Strong bond. F: Unemployed, dreams, gambles. Bitter toward women, & Australia. Spartan home environment.	C: BM Counselling P: Uninvolved 27 months	Began to integrate home/school values. Learned to recognise & to express feelings. Behaviour in class consistently good. Severely behind in. schoolwork.	To S.H.S with support. Left when S.P.E.R C support ended.	Dropped out yr 8. S: Poorly adjusted.

APPENDIX B

Parent Interview Schedule.

1. Who lives in the house and what are their occupations and ages?

2. Are you in contact with any other parents you met through the S.P.E.R. Centre?

3. What effects do you think attending the S.P.E.R. Centre had on your child's behaviour and adjustment?

   Negative   Not much   Positive

4. What were some of the advantages for your child in attending this centre?

5. What were some of the disadvantages for your child in attending this centre?

4. Given the choice again, what decisions do you feel you would make now about the problems you were experiencing?

   Different   Not sure   Similar

5. How satisfactory was your experience with the programme?

   Unsatisfactory   Okay   Helpful.

6. Was the programme what you expected ?

   No   Not sure   Yes

   Tell more?

7. Was your child happier for attending ?

   No   Worse   The same   Yes

8. How do you feel about your child now with regard to his behaviour?

   Negatively   Okay   Positively

9. How do you feel about your child now with regard to his schoolwork?

   Negatively   Okay   Positively

10. How do you feel about this child now in the family?

    Negatively   Okay   Positively

11. How is the family functioning ?

    Poorly   Okay   Well

12. What recommendations would you make to improve the S.P.E.R. Centre experience for your child?

13. Have you been involved with any other helping agencies since leaving the S.P.E.R. Centre?

    If so which ones?

14. What were the reasons for contacting this agency?

15. Are you still in contact with this agency?

APPENDIX C

Student Interview Schedule

1. How do you feel about school now ?

   Not too good Okay Good

2. Who do you play with at school?

3. Who do you play with outside school?

4. What was it like for you at the S.P.E.R. Centre ?

   Not too good Okay Good

5. Tell me some of the good things about the S.P.E.R. Centre?

6. What were some of the bad things about the S.P.E.R. Centre?

7. What was school like for you before you began at the S.P.E.R. Centre ?

   Not too good Okay Good I don't remember

8. How did you come to attend the S.P.E.R. Centre?

9. Do you think attending the S.P.E.R. Centre helped you?

   Not much   A little   A lot

   If so, how do you feel it helped?

10. What do you like doing best at school?

11. Tell me some of the things you like doing best outside school.

12. Do you see any of the others from the S.P.E.R. Centre now?

13. What would you like to do once you leave school?

14. How good are your chances of doing this?