The effect of three interventions on the self-esteem, behaviour and other affective variables for a group of children with emotional and behavioural difficulties in a local authority residential special school

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by

Robert Ogier

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SUMMARY

This thesis investigates the effect of three separate interventions of social skills, co-operative learning and self-talk (positive self-referent verbal statements – PSRVS) on the self-esteem, behaviour and other affective variables on a small group of children in a Local Education Authority residential special school who have emotional and behavioural difficulties (EBD). The study examines two main research questions: What impact do three different types of intervention have on the children's self-rated self-esteem and behaviour as observed in a free-time session. Secondly, what impact do the three interventions have on the children's self-rated locus of control, self-rated peer relationships, overt self-esteem and overt behaviour as rated by teachers and care staff.

The first chapter introduces definitions of self-esteem and emotional and behavioural difficulties and the significance of the study. The prognosis for children with emotional difficulties and the dearth of research is then discussed. The focus of the study is explained and the two key research questions are stated.

Chapter two consists of three main sections. The first section examines the history of the classification of children with emotional and behavioural difficulties and is followed by a discussion on the problems of the definition of these children. The second section examines the history of the concept of self, followed by the theoretical importance of the self-concept. The third section examines the evidence for children with emotional and behavioural difficulties having low self-concept.

Chapter three is the literature review and is divided into three main sections, social skills training, co-operative learning and cognitive behavioural interventions. Each section examines in turn the rationale, definitions and history of the three interventions. A discussion of the theories of social competence and social skills are also included.

Chapter four examines the value of multiple interventions and multiple measurements for children with emotional and behavioural difficulties, contending that it is unwise to employ a single intervention, or a single set of assessment measures-we need
a variety. Initially, we examine the problems encountered in the measurement of the affective states of children with emotional and behavioural difficulties due to multiple definitions and unsatisfactory descriptions of their characteristics. We then examine the utility of rating scales, followed by the theoretical problems associated with the measurement of self-esteem. Whether children with emotional and behavioural difficulties actually do have low self-esteem, or whether they have what is termed ‘positive illusory bias’ or ‘false-self behaviour’ in reporting and assessment is then examined. Problems encountered when trying to access the false self are discussed.

Chapter five describes the methodology employed in the current study whereby each self-contained intervention was sequentially applied in order to ascertain the effects on the children's self-esteem, locus of control, peer relationships, overt self-esteem, and overt behaviour. After a small pilot study all children in both the experimental and comparison groups rated their self-esteem, completed a measure of their locus of control and a measure of who they would like to 'play with' and 'work with'. Teachers and care-staff rated the children's overt behavioural self-esteem and their overt emotional and behavioural disturbance. All these measures were obtained for both experimental and comparison groups before and after each intervention and at a four month follow-up. Each intervention lasted for thirty minutes, three mornings a week for a total of approximately seven weeks. Teacher aides carried out behavioural observations during interventions and edible reinforcers (sweets) were given for compliance. The comparison group received the same average level of edible reinforcers but these were not given contingent upon their performance.

A baseline of the experimental group’s ‘naturalistic’ behaviours in a controlled free time setting was obtained. This occurred every Friday afternoon and lasted for thirty minutes and took place throughout the duration of the three interventions in order to provide a measure of appropriate peer interaction.
In chapter six the results of the research questions are addressed in turn commencing with the results of global self-esteem for the fourteen children in the experimental and comparison groups. The lie scores are then presented. This is followed by the graphs of behavioural observations on the experimental group (only) that took place on each Friday afternoon, monitoring and recording 'positive', 'negative' and 'alone' social behaviours in a free-time half-hour session. The results for locus of control, the peer preferences questionnaire, Coopersmith's Behaviour Rating Form for overt self-esteem, and finally the results of Rutter's B2 Behaviour Questionnaire are presented. Both the experimental and comparison group completed all measures stated above at pre-test, after the first social skills intervention '1', after the second co-operative learning intervention '2', after the third intervention '3' and at a four-month follow-up '4'. Overall the findings provide little support for the effects of the three interventions on any of the measures taken, with the exception of the behavioural observations taken on Friday afternoons.

The final chapter discusses the findings from the current study in relation to the two research questions and the issues of measurement that pervade the whole study in the light of previous research found in the literature on children with emotional and behavioural difficulties. It is concluded that the existing literature may provide a somewhat erroneous picture of the self-esteem and affective variables of these children. Also the existing literature may provide a somewhat erroneous picture of how easy it is to impact on their self-esteem and other affective variables. The chapter ends with a discussion of the major weaknesses of the current study, areas for future research and implications for practitioners.
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ABBREVIATIONS

CHANGES IN ADMINISTRATIVE TITLES (U.K. EDUCATION)
### ABBREVIATIONS

<table>
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<tr>
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<tr>
<td>ADHD</td>
<td>Attention deficit syndrome</td>
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<tr>
<td>BCFSE</td>
<td>Battle's culture free self-esteem questionnaire</td>
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<td>BRF</td>
<td>Behaviour rating form</td>
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<tr>
<td>CB</td>
<td>Cognitive behavioural</td>
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<tr>
<td>CBM</td>
<td>Cognitive behaviour modification</td>
</tr>
<tr>
<td>CIRC</td>
<td>Cooperative Integrated Reading and Composition, Comp. Comparison group</td>
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<tr>
<td>CWPT</td>
<td>Class Wide Peer Tutouring</td>
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<tr>
<td>DSM-111-R</td>
<td>Diagnostic and Statistical Manual of Mental Health Disorders</td>
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<tr>
<td>DUSO</td>
<td>Development of Self and Others'</td>
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<td>EBD</td>
<td>Emotional and behavioural difficulties</td>
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<td>EEP</td>
<td>Externalising emotional problems</td>
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<tr>
<td>Expt.</td>
<td>Experimental group</td>
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<td>IAR</td>
<td>Relative Anxiety Scales for Children and Adults</td>
</tr>
<tr>
<td>IEP</td>
<td>Internalising emotional problems</td>
</tr>
<tr>
<td>LAWSEQ</td>
<td>Lawrence's self-esteem questionnaire</td>
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<td>LD</td>
<td>Learning difficulties</td>
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<tr>
<td>MMPI</td>
<td>Minnesota Multiphasic Personality Inventory</td>
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<td>MMR</td>
<td>Mild mental retardation</td>
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<tr>
<td>PSRVS</td>
<td>Positive self-referent verbal statements</td>
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<tr>
<td>RAS</td>
<td>Relative Anxiety Scales for Children and Adults</td>
</tr>
<tr>
<td>SED</td>
<td>Seriously emotionally disturbed</td>
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<tr>
<td>SEN</td>
<td>Special educational needs</td>
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<tr>
<td>SOM</td>
<td>State of mind</td>
</tr>
<tr>
<td>STAD</td>
<td>Student Teams Achievement Division</td>
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<tr>
<td>TAI</td>
<td>Team Assisted Individualisation</td>
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<td>TRR</td>
<td>Team Research Report</td>
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### CHANGES IN ADMINISTRATIVE TITLES (U.K. EDUCATION)

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<td>1992-1995</td>
<td>Department for Education (DFE)</td>
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<td>1995-2000</td>
<td>Department for Education and Employment (DfEE)</td>
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<tr>
<td>2000-2002</td>
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CHAPTER 1

1.0. INTRODUCTION

Self-esteem is generally recognised as a critical determinate for success and happiness in all ages and in all walks of life. Although it is generally recognised that children with low self-esteem do poorly in schools, there is also recognition that low self-esteem can stop children attaining their full potential. This has an immediate detrimental effect in school, and can continue throughout their life, even having a negative 'knock-on' effect for society in general. With this increased realisation has come a resurgence of interest in the impact of low self-esteem for children, especially those with special needs and/or behavioural problems.

Children with emotional and behavioural difficulties are generally recognised to have the greatest difficulty in school, and the worst prognosis for success and happiness throughout later life (Gresham, MacMillan, Bocian, Ward & Forness, 1998; Rock Fessler & Church, 1997). They are also thought to have the lowest self-esteem of any special needs group (Lund, 1987; Margerison, 1996). How to raise self-esteem has therefore increasingly become a focus of interest for researchers and practitioners working with such children. With the above in mind, this study seeks to investigate the self-esteem of a small group of children who have emotional and behavioural difficulties.

1.1 CONTENTS

Chapter 1 outlines the significance of the study. It examines how children with emotional and behavioural difficulties and their associated plethora of problems,
including concomitant low self-esteem, has led to various intervention programmes being recommended in the literature. Secondly, the paucity of information on the self-esteem of children with emotional and behavioural difficulties, and other affective variables has led the writer to investigate the postulated links between self-esteem enhancement and three interventions of ‘social skills’, ‘co-operative learning’ and ‘positive self-referent verbal statements’. These are all promoted in the literature as enhancing self-esteem and other affective variables. For example, Margerison (1996) recommended developing social skills within the school setting by providing a co-operative or social setting for children who are emotionally and behaviourally disturbed. Malik & Furman, (1993) in their paper on the assessment and treatment of children with peer relationship problems and associated low self-esteem in a variety of areas, recommended a number of treatment options to increase self-esteem. These were social skills training, co-operative group interventions and social cognitive interventions. These are the three interventions used in this study.

The main focus of the study is the impact of the three separate interventions of ‘social skills’, ‘co-operative learning’ and a ‘cognitive behavioural intervention’ on the self-esteem of children with emotional and behavioural difficulties. The second focus examines the impact of the interventions on the children’s operationally defined behaviour in a free-time setting. The third focus is on the impact of the interventions on ‘personal competence’ as measured by self-ratings of locus of control and peer relationships. The fourth focus examines the impact of the interventions on overt behavioural self-esteem and overt behaviour, as rated by significant others. The fifth focus, discussed in chapter 4, concentrates on measurements issues, particularly the difficulties in defining self-esteem and emotional and behavioural difficulties. However, measurement issues pervade the whole study.
1.2. THE DEFINITION OF SELF-ESTEEM

Self-esteem is difficult to define and is subsumed under the umbrella concept of self-concept (Lawrence, 1988). Various definitions are acceptable, and most are very similar. For example: Coopersmith (1967) defined self-esteem as 'the evaluation that the individual makes and customarily maintains with regard to himself; it expresses an attitude of approval or disapproval and indicates the extent to which the individual believes himself to be capable, significant, successful and worthy' (p.4). Similarly Battle (1992) defines self-esteem as 'the perception an individual possesses of his or her own worth' (p.3). Also, according to Pope, McHale & Craighead, (1988) 'self-esteem is an evaluation of the information contained in the self-concept and is derived from a child's feelings about all the things we are' (p.2). Lawrence (1988) maintains that:

'Self-image is what the person is
Ideal-self is what the person would like to be
Self-esteem is what the person feels about the discrepancy between what he/she is and what he/she would like to be' (Lawrence, 1988, p.2). Also, self-esteem is differentiated from self-image. The self-image is described as 'the individual's awareness of his/her mental and physical characteristics... Self-image is our starting point for an understanding of self-esteem' (Lawrence, 1988, p.3). Self-esteem is also differentiated from the ideal-self. The ideal-self is described as an image of what a person would like to be. Therefore, the definition used in this thesis is 'the individual's evaluation of the discrepancy between the self-image and the ideal-self. It is an affective process and is a measure of the extent to which an individual cares about this discrepancy' (Lawrence, 1988, p.4).

Self-esteem is generally characterised as 'global' and constructed of several integrative dimensions; academic, social, familial and body image. Global self-esteem is
a general appraisal of the self based upon its separate multifarious constituents and is typically much more strongly influenced by non-academic components (Marsh & Young 1997). Global self-esteem has associated motivational aspects such as one's feelings of control over a particular situation; for example the decision as to whether it's worth attempting a task.

Self-esteem is resistant to change possibly in order to maintain a sense of self-consistency. It is hierarchical and develops as a result of interpersonal relationships within the family followed by school and society at large (Shavelson and Bolus, 1982, cited in Lawrence, 1988). Self-esteem is postulated as an intervening variable in order to explain individuals' behaviour. This hypothetical construct that exists between stimulus and response can by its very nature only be inferred, and accessed through imprecise psychometric techniques. This will be discussed more fully in chapter 2. However, self-esteem is considered a crucial determinate in guiding and controlling an individual's behaviour.

1.3. **THE DEFINITION OF EMOTIONAL AND BEHAVIOURAL DIFFICULTIES**

The definition of emotional and behavioural difficulties (EBD) has been problematic within the education service. DFE Circular, 9/94 admits to 'various definitions' of emotional and behavioural difficulties. Emotional and behavioural difficulties are associated with both learning difficulties and loss of self-esteem. Nevertheless, the currently accepted definition is stated as:

'Emotional and behavioural difficulties lie on the continuum of behaviour which challenges teachers but is within normal, albeit unacceptable, bounds and that which is indicative of serious mental illness. The distinction between normal but stressed
behaviour, emotional and behavioural difficulties and behaviour arising from mental illness is important because each needs to be treated differently’ (p.7).

...and later, in the same circular:

‘Emotional and behavioural difficulties range from social maladaptation to abnormal stresses. They are persistent (if not necessarily permanent) and constitute learning difficulties’ (p.7).

and...

‘In terms of the legislation, they have 'learning difficulties' because they are facing barriers which cause them to have significantly greater difficulty in learning than most of their peers’ (p.8).

...and furthermore:

‘These impediments affect their achievement and sometimes that of others. Some children's learning difficulties will have caused or aggravated their emotional and behavioural difficulties, often accompanied by a significant loss of self-esteem’ (p8.).

This definition covers the full spectrum of emotional and behavioural difficulties, including those that are not disruptive or intrusive, which was first manifested in the Underwood Report (1955, cited in Daniels, Visser, Cole & Reybekill, 1999).

Prominent researchers have also proposed their own definitions, which are similar, but often a little more all-encompassing, circular and to some extent tautological. For example Cooper (1996c) defined emotional and behavioural difficulties as:

‘Any problem of an emotional or behavioural nature that is experienced by a young person to an extent that it interferes with their personal, social and/or educational development. We take this to include psycho-social problems, such as socialised deviancy and delinquency; low self-esteem, anxiety, withdrawn and acting-out behaviour. We also see as falling under this broad heading problems of a broadly
bio-psychological nature, such as those associated with ADHD, autism and related conditions' (p.1).

According to Charlton & David (1993), cited in Daniels et al. (1999), from a school point of view, emotional and behavioural difficulties are seen solely in terms of behaviour. No mention is made of emotional difficulties. Their definition highlights the context-specific nature of some emotional and behavioural difficulties so that it includes behaviour which is manifested verbally or physically and which covertly challenges (to varying degrees and in a variety of ways) the authority of the teacher or the school. This can include a catalogue of comparatively minor misdemeanours which, whilst not immediately challenging the authority of teachers, demand the expenditure of inordinate amounts of teacher time and energy.

This definition implies that what is appropriate behaviour for one school may be quite unacceptable for another, and this is reinforced in the DfEE document 'It may be entirely consistent with the law for a child to be said to have special educational needs in one school, but not in another' (DfEE, 1997, p.12). This DfEE document states that the number of children perceived as falling within the definition of Special Educational Needs is increasing. A distinction between emotional and behavioural difficulties and disaffected behaviour is made, stating that the latter are predominant and are swamping resources intended for the latter. It also states that the term ‘children with emotional and behavioural difficulties’ applies to a broad range of young people (predominantly boys) with a very wide spectrum of needs, from those with short-term emotional difficulties to those with extremely challenging behaviour or serious psychological difficulties. It is admitted that defining this group is not easy; difficulties are compounded by the fact that different agencies often use different terminology. The document does not link low self-esteem to children with emotional and behavioural problems directly, but does so tangentially; ‘Schools need to offer a setting where all children are valued and
encouraged to behave well, where there are clear guidelines for behaviour, teaching is positive, and where damaged self-esteem can be rebuilt’ (DfEE, 1997, p.12). ‘Children with emotional and behavioural difficulties are at great risk of under-achievement, educationally and in their personal development, and can disrupt the education of others’ (DfEE, 1997, p.78).

1.4. SIGNIFICANCE OF THE STUDY/EXPERIMENTAL SETTING

The current study is significant in two major ways. Firstly, the current study attempts to ascertain whether three common interventions of ‘social skills’, ‘co-operative learning’ and ‘cognitive behavioural interventions’ (self-talk), all promoted in the literature as enhancing self-esteem, behaviour and other affective variables, are effective in raising the self-esteem of children who have emotional and behavioural difficulties, thereby enhancing their future prospects.

Secondly, there is little research carried out on self-esteem and other affective variables or behaviour in classrooms with children with emotional and behavioural difficulties who are in residential special schools in ‘real life’ settings.

Bridgeview School is a Local Education Authority residential special school and was purpose-built in 1978. All children are statemented as having emotional and behavioural difficulties. Whilst pupils range from below to above average intelligence, the vast majority are underfunctioning educationally and socially. About 85 children are on the school role at any one time. The junior department consists of 3 classes of up to 8 children aged approximately 8-11, the middle junior department consists of 4 classes of up to 8 children aged approximately 11-14 and the senior department consists of 4 classes of up to 8 children aged approximately 14-16. Each child fully participates in all National Curriculum subjects and individually follows a prescribed package in
Mathematics and English lessons tailored to suit their particular needs. There is a growing Alternative Learning Package, off site, that entails supervised monitoring of set academic work, a college placement, and work experience which is on offer to the senior school children only.

There are 16 teachers and 20 care staff. The Headteacher, the Deputy Headteacher and the Head of Care live on the site as do some of the care staff. The care staff are on duty during the time children are not in school lessons. As a high level of help and supervision is possible, everyday problems or concerns can be addressed not only in the school day but also in the after-school sessions if necessary. Most classes have a teacher’s aide to assist with either individual children or with the group as a whole during English and Mathematics lessons, and occasionally in other subjects.

All the children involved in the study had Statements of SEN and were matched on the variables of age, standardised maths and English scores. The mean age of the experimental and control groups was 12.3 years. Standardised tests (Neale) of reading gave a mean group score of 9.52 years. Standardised tests (Vernon) of mathematics gave a mean group score of 9.07 years.

The experimental group contained six boys only (originally eight), and the control group contained six boys and two girls. It is a criteria of admission that the child’s behaviour is too difficult for education in a mainstream school. Daily records of behavioural disturbance are kept by both teachers and care staff in report books and on ‘incident’ forms. A high level of behavioural disturbance was catalogued for some children in particular. This was often on a lesson-by-lesson basis and also occurred in evening activities. Examples of such behaviour were frequent defiance towards staff, disruption of lessons/activities and a refusal to complete set work or to join in activities. All children had a long catalogued history of aggressive behaviour, both physical and
verbal, towards staff and peers, and frequently engaged in inappropriate overt attention-seeking behaviour.

1.5. **THE PROGNOSIS FOR CHILDREN WITH EMOTIONAL AND BEHAVIOURAL DIFFICULTIES**

Ways of improving school and life prospects for children with emotional and behavioural difficulties are of great theoretical and practical interest to researchers, practitioners and society at large. Unfortunately many children with emotional and behavioural difficulties are found to experience long-standing and acute problems. These extremely vulnerable children generally have a poor future prognosis (Daniels et al., 1999; Gresham et al., 1998; Rock et al., 1997).

Researchers have reported a multitude of problems for children with emotional and behavioural difficulties in their school careers and later in their personal lives (Bender, 1987; Cooper, 1996a; Daniels et al., 1999; Sinclair, Forness & Alexson, 1985; Wagner, D'Amico, Marder, Newman & Blakorby, 1993, cited in Rock et al., 1997). Still other research suggests that students with emotional and behavioural difficulties have the least positive outcomes of any group of children with disabilities (Gresham et al., 1998; Rock et al., 1997; Wagner, Newman, D'Amico, Jay, Butlin-Nalin, Marder & Cox, 1991, cited in Rock et al., 1997).

These studies have shown that students with Serious Emotional Disturbance (SED) have a very poor prognosis both in and out of school. They are far more likely to be given lower grades, fail more often, placed in 'restrictive' settings, and drop out of school, even when compared with other groups of children with disabilities. In particular, individuals with emotional and behavioural difficulties were found to have great difficulty finding employment, have poor job stability and low rates of
participation in post-secondary education (Wagner et al., 1993). As young adults they are more frequently involved with agencies such as mental health, welfare, public health, and are more likely to be susceptible to substance abuse and criminality. The poorest of outcomes are associated with students experiencing both emotional and behavioural difficulties and other special needs. Babinski, Hartsough & Lambert (1999), in reconsidering the relationship of childhood disorders and conduct problems with adult crime found clear evidence that serious adult criminal involvement is often the result of a developmental progression from childhood behavioural problems through adolescent delinquency to later offending.

The prognosis for children with emotional and behavioural difficulties is of particular concern to those who work with these children. Any methods that can enhance their self-esteem are to be welcomed. The significance of this study is that by improving self-esteem one may positively impact upon their current performances and future prospects. This has been recognised in recent government publications. For example the DfEE document 9/94 states ‘Improvements in pupil behaviour are more likely to follow if the pupil's self-esteem is enhanced, and if the pupil can be helped to recognise the effects of his or her behaviour’ (p.11).

1.6. THE DEARTH OF RESEARCH

Another reason why this study is significant is the lack of a research base concentrating on children with emotional and behavioural difficulties and their concomitant low self-esteem. There is also a lack of empirical evidence on the extent to which known effective interventions in dealing with these two related issues of self-esteem and emotional and behavioural difficulties is implemented in practice (Daniels et al., 1999). This is especially the case if one looks at actual classroom interventions with children
with emotional and behavioural difficulties. The lack of a research base and absence of empirical evidence of the enhancement of children's self-esteem and related psychological constructs is even more acute if one tries to find studies carried out in classroom settings in residential special schools. An examination of the research literature shows that this is virtually non-existent.

Rock et al. (1997) has also commented on the dearth of literature examining outcomes specific to students with emotional and behavioural difficulties. They cite one notable exception of a longitudinal study by Mckinney & Feagans (1984) and McKinney (1989) which found that elementary-aged children with learning difficulties and behavioural disorders displayed a declining pattern of academic progress and typically increased in maladaptive behaviour over time. However, all the studies cited by Gresham et al., (1998) on children with externalising behaviour patterns and conduct problems coupled with aggressive/antisocial behaviour, show that outcomes are not positive.

There are two main reasons why it is important to examine various different types of intervention with children who are emotionally and behaviourally disturbed. The first is that, as these children have a multitude of diverse problems it is highly unlikely that one simple intervention can successfully address all of them. Furthermore, it is unlikely that one simple measure of efficacy can be used to determine the success of any one intervention. It was for this very reason that multiple interventions as well as multiple measures of success were used in this study. A broad spectrum of measures is undertaken in order to gauge the effect of each intervention both individually and cumulatively on the children's affective states and their behaviour.

There has been considerable interest amongst researchers and practitioners regarding the possibility of self-esteem enhancement through the delivery of what is broadly termed 'social skills' training: In the eighties, for example, Gresham maintained that:
future social skills training research should focus on changes in levels of self-efficacy as a function of specific training strategies. It may well be the case that there is a relation between the level of self-efficacy an individual possesses in specific social behaviours and the degree of generalisation of these behaviours across settings, situations and time. This hypothesis, however awaits empirical investigation' (Gresham, 1987 p.543).

It is important to discover if 'social skills training programmes' have an effect upon children's self-esteem, and whether the efficacy is the same for all children. To this end, researchers have also recommended that social skills training and its effect on children's self-esteem and personal competence should be investigated, (Gresham, 1987; Margerison, 1996; Malik & Furman, 1993).

Educators have come to realise the importance of self-esteem for special populations within schools containing children who are emotionally and behaviourally disturbed. There is ample evidence in the literature demonstrating improvements in self-esteem using social skills, co-operative learning and positive self-referent verbal statements on 'normal' children. However, there is also a widespread impression, but little actual research evidence (Gresham & MacMillan, 1997) in the literature, that children with emotional and behavioural difficulties also respond favourably to these interventions. The evidence for these interventions impacting on the self-esteem of children with emotional and behavioural difficulties is much less secure.
1.7. THE FOCUS OF THE STUDY

1.7.1. THE MAIN FOCUS OF THE STUDY - THE IMPACT OF THE THREE INTERVENTIONS ON THE CHILDREN'S SELF-ESTEEM

Unlike the study of children with emotional and behavioural difficulties, the study of self-esteem has a long established and respected investigative history in the research literature. The practical applications of findings from self-esteem studies are of obvious interest in many fields of human endeavour and particularly so in the educational field (Cooper, 1993, 1996a, 1996b, 1996c: Martin & Hayes, 1999; Place, Wilson, Martin & Hulsmeier, 1999). In fact, according to Harter, Whitesell & Junkin, (1998) the past three decades have witnessed a renewal of interest in self-perceptions with self-theorists reconceptualising the self as a cognitive construct that is functional in bringing organisation and meaning to one's experience.

Furthermore, the intervening variable of self-esteem is increasingly realised as being of fundamental importance to a great many facets of our lives and over time has been positively linked to a multitude of other academic and social variables. For example, self-esteem and the related, but distinguishable, self-concept has been linked with:

- deficits in social skills (Rosenberg, 1997; Rock et al., 1997)
- positive self verbal referents (Gurney, 1987)
- delinquency (Barkley, 1994; Parker & Asher, 1987)
- drug abuse (Finn, Scott and Zariachny, 1988)
- criminal activity (Finn, Scott and Zariachny, 1988)
- depression (Angold, Costello & Erkanli, 1999)
• locus of control (Ames, 1981; Jones, 1992)
• peer problems (Bryant & Bryant, 1998; Stanne et al., 1999)
• ADHD (Cooper, 1996b; Cooper & Ideus, 1995; Cooper & Shea, 1998).

Today, low self-esteem is considered to be a secondary characteristic in large numbers of children with emotional and behavioural difficulties (Cooper, 1996b; Martin & Hayes, 1999; Place et al., 1999) and it is therefore incumbent upon their teachers to address this problem. The findings from this study may help practitioners to do so.

Whilst it is neither possible nor realistic to directly address each difficulty presented by children with emotional and behavioural difficulties, it is possible to attempt to enhance one particular area such as their general self-esteem. This is the primary focus of the study. Self-esteem is seen as an important predictor of current, and perhaps even more importantly, future success, which is especially relevant for such children. A healthy sense of self-esteem can aid individuals avoid current and future problems. Low self-esteem is regularly cited as being associated with psychiatric disorders (Cooper, 1996c; Lawrence 1988). However, correlational studies cannot determine causality and the equivocal evidence linking self-esteem and emotional and behavioural difficulties is examined later in this chapter in more detail.

Margerison (1996) stated that a principle tenet of the 'folk psychology' of teaching is that a child's ability to learn in school is often related to his/her self-esteem. He believes that self-esteem has a significant effect on the development and learning of children, especially those with emotional and behavioural difficulties, and has expounded on the necessity of attempting to raise self-esteem in order for those children to reach their full potential.

The study of self-esteem, therefore, is of great interest to researchers and practitioners alike, as is the study of children with emotional and behavioural
difficulties. Crucially, self-esteem is recognised as a major psychological construct which influences almost every aspect of human personality.

1.7.2. THE SECOND FOCUS OF THE STUDY - THE IMPACT OF THE THREE INTERVENTIONS ON THE CHILDREN'S OPERATIONALLY DEFINED BEHAVIOUR

The second focus concentrated on actual measures of classroom behaviour, operationally defined as 'positive', 'negative' or 'alone'. These classroom behavioural observations were carried out in a controlled 'free-time' setting by teachers' aides, under the supervision of the author. The children's behaviours were measured in half-hour Friday afternoon supervised free-time sessions throughout the duration of the study. This focus is important as it measures the improvements in operationally defined behaviour that occurred in a free-time session, based on the work of Ladd (1981).

Children who have emotional and behavioural difficulties have, by definition, both 'emotional' and 'behavioural' problems. However, it is invariably the 'behaviour' rather than the 'emotional' aspects of their difficulties that cause them to be brought to the initial attention of the class teacher (Daniels et al., 1999). If the behaviour exhibited by the child is sufficiently disrupting/disturbing then eventually the school's internal hierarchy of managers become aware of the problem 'behaviour'. This is followed by further intervention designed to alter the 'behaviour' and if this fails, then possible statementing and in rare cases placement in a residential special school occurs. It is much more unusual for the internal, perhaps unobserved/undiscovered 'emotional' problems to be sufficient cause in themselves to set this train of events in motion. If emotional problems are diagnosed, then they have to be shown to be present by aberrations in the child's behaviour.
Research on children who have emotional and behavioural problems is concentrated primarily on either the affective dimensions of the child, i.e. their internal 'mental' state, concentrating on the 'emotional' aspect of the definition of emotional and behavioural difficulties, or their behaviour, as observed in studies that have a behaviouristic bent. Teachers, however, are invariably only interested in the latter (Daniels et al., 1999).

Most studies of children with emotional and behavioural difficulties, therefore, measure success by concentrating on either observable behaviour or affective dimensions of the subject's personality. Unfortunately most studies neglect to combine the two approaches which together can be a greater diagnostic tool. Measures are seen as if they are somehow mutually exclusive. It is the author's considered view that both dimensions of measurement are essential to get an accurate and rounded picture of the efficacy of any intervention for children with emotional and behavioural difficulties.

The writer is aware of no other study that examines both the affective and behavioural aspects of children who have emotional and behavioural difficulties in such depth as the current study. According to Daniels et al. (1999) any search for one single solution for dealing with the wide range of behaviours associated with children who have emotional and behavioural difficulties is likely to be futile. Any intervention should be eclectic by nature. Therefore, the second focus is important as it concentrates on operationally defined behavioural dimensions.
The third focus of this study investigates the effect of each of the three interventions on the children's sense of 'personal competence' as measured by locus of control and peer relationships. There is a postulated link in the literature between self-esteem, perceptions of personal competence, and peer relationships. Children who experience low levels of perceptions of personal competence, such as low levels of self-esteem, are well documented to experience a multitude of other problems (Gresham, 1987; Gresham et al., 1998).

Although children with emotional and behavioural difficulties experience particular difficulties with self-esteem, they also experience difficulties in peer relationships, externalising behaviour patterns (locus of control) and in school adjustment due to their lack of social skills (DfEE, 1997; Gresham et al., 1998; DfE 9/94; DfEE 1997). These behaviour patterns have long-term effects on children's adjustment in later life and it is possible to predict, for example, criminality and adult mental health problems from earlier studies of behaviour problems (Angold, Costello & Erkanli, 1999; Babinski, Hartsought & Lambert, 1999; Rock et al., 1997).

The third focus was, therefore, to investigate the effect of each intervention on the pupils' 'personal competence'. Personal competence, a sense of personal mastery over one's environment, functions as a primary motivator of human behaviour. White (1959) suggested that individuals strive to be competent or effective in their interactions with the environment. Bandura (1982) has amended and reconceptualised this idea of competency or mastery into the theory of self-efficacy. The basic phenomenon in self-efficacy focuses on individuals' perceptions that can produce and regulate events in their
lives (Bandura, 1982). The third focus was subdivided into two areas. The independent variables were: the children's own self-reports of their locus of control as measured by Norwicki & Strickland's (1973) measure of generalised locus of control, and their peer preferences of whom they would most like to work/play with, using a peer roster and 5 point rating scale, based on Singleton & Asher (1977).

This study is significant in so far as it attempts to address and remediate the problems that children experience in the actual classroom setting.

Students with behavioural problems experience acute difficulties in gaining acceptance from significant others, (teachers and peers) and are at risk of academic failure. Other significant educational problems are high dropout rates, high absenteeism, a high rate of suspension, alarmingly poor overall academic achievement reflected in low reading, writing, and maths levels, and teachers who are ill-prepared to cope with their behavioural problems. Malik & Furman (1993) focused on the differential kinds of difficulties that children can have with their peers, as well as the correlates and consequences of such problems in childhood. In their practitioner review paper they found evidence in the literature that approximately 10-15% of 'normal' children are rejected by their peer group, citing Coie & Dodge, (1983). These children also often experience loneliness, low self-esteem and social anxiety with the biggest difference in self-esteem between children with no friends and those with at least one friend. This has lead Malik & Furman (1993) to speculate that the existence of quality friendships are as important to children's adjustment as peer acceptance.

Other characteristics of problems in peer relations are those of 'victims'. Approximately 10% of all 'normal' children suffer from serious victimisation by others. These children are again characterised by low self-esteem in a variety of areas, and they tend to be lonely, anxious, cautious, sensitive and fearful of and isolated from other children. Another group of children with problems in peer relationships, identified as
'socially anxious' were found by Ginsberg, La Greca & Silverman (1998) to report low levels of social acceptance and global self-esteem and more negative social interactions.

Other recent studies, for example (Bishop, & Inderbitzen, 1995) have looked at the link between peer relations and self-esteem, specifically how peer acceptance and friendship are related to self-esteem. They examined the self-esteem scores of 542 9th grader pupils and found no difference in self-esteem scores across sociometric groups. However, they found that subjects with at least one reciprocal friend had higher self-esteem scores than subjects without a friend. There did not appear to be a cumulative effect of number of friendships on self-esteem scores. They recommended social skills training for children who lacked a close friend as a way of improving self-esteem. Children who are 'rejected' and 'aggressive', or who are 'victims' or 'anxious' tend to characteristically experience problems with peer relationships and self-esteem. These behaviour patterns have long-term effects on adjustment status in later life and, in many cases, predict adult mental health difficulties especially for children who experience emotional and behavioural difficulties.

At the school level, researchers have found that teaching is more effective when the teaching approach focuses not only on the development of skills, but also on the students' affective state, concentrating in particular on their self-esteem (Barrow, 1996; Lawrence, 1988). Again these research findings reinforce how important it is for teachers of children with emotional and behavioural difficulties to address their affective state.

This study is significant in that by investigating methods of ameliorating these difficulties, it not only examines self-esteem, but also other debilitating affective dimensions to which children with emotional and behavioural difficulties are predisposed.
1.7.4. THE FOURTH FOCUS OF THE STUDY - THE IMPACT OF THE THREE INTERVENTIONS ON THE CHILDREN'S OVERT BEHAVIOURAL SELF-ESTEEM AND OVERT BEHAVIOUR AS RATED BY SIGNIFICANT OTHERS

The fourth focus was to investigate the effect of each intervention on the children's overt 'behaviour'. The children’s overt behavioural self-esteem was rated using Coopersmith’s Behaviour Rating Form and their overt behaviour measuring their level of emotional and behavioural disturbance was rated using Rutters B2 Behaviour Questionnaire by both the teaching and care staff in the school.

Many researchers (Bear, Minke, Griffin & Deemer, 1998; Helmke, 1994; Obiakor & Algozzine, 1994) have commented on the possibility that models of self-concept for children are not always accurate, consistent, extensive, overt and may change in different contexts. This is the case with young children, children with special needs and particularly children who have emotional and behavioural difficulties.

Other researchers and theoreticians (Gresham & MacMillan, 1997; Gresham et al., 1998) have also drawn attention to the possibility of what is termed positive illusory bias or false self-behaviour, whereby children retain an overtly positive view of themselves in spite of contradictory evidence from others. Some researchers (Harter, Whitesell & Junkin, 1998) acknowledge the existence of positive illusory bias or false self-behaviour but maintain that it is better explained as a product of social comparison with one’s peers. Therefore, not everyone is convinced that measures of self-reported self-esteem provide accurate and reliable indices of individuals’ genuine perception of themselves. It was thought prudent therefore, to add a further measure of (overt) self-esteem to compare with self-reported self-esteem.

Another measure of adjustment is the children’s level of emotional and behavioural disturbance as measured by Rutters B2 Behaviour Questionnaire. According to Rutter
an accurate assessment of children requires a combination of several different approaches to the measurement of their behaviour and questionnaires have an important role to play. Overt behaviour can be observed in the actual classroom and around the school in general. Monitoring by care staff has the distinct advantage of not only having another 'dimension' of behavioural observation but also the ability to assess whether generalisation from the interventions in the classroom has transferred to the social activities in the dormitories. The current study, therefore included observations by experienced teachers who monitor behaviour occurring throughout the school day in lessons, and care staff who monitor behaviour during lunch times and throughout the rest of the time children are in school, including the evenings. The constant proximity in which both groups of staff work with the children is advantageous. Only eight children are in each class and the care staff to child ratio in the dormitories is even lower.

Therefore, in an attempt to obtain the most comprehensive picture of 'behaviour' as possible, the third focus examines both teaching and care staff ratings of both the children's overt self-esteem and their level of emotional and behavioural disturbance.

1.7.5. THE FIFTH FOCUS OF THE STUDY - THE PERVERSIVE INFLUENCE OF MEASUREMENT ISSUES

Although measurement issues pervade the whole study, the fifth focus concentrates on difficulties in defining 'self-esteem' and 'emotional and behavioural difficulties'. Some researchers have qualms about the hypothetical intervening variable of self-esteem (Griffiths, 1993; Harre, 1998; London, 1996), questioning whether we understand the concept and whether self-esteem is in fact a useful measure at all. Other researchers have questioned the view (Margerison, 1996) that children with emotional and behavioural difficulties are supposedly predisposed to 'low' self-esteem.
The fifth focus of the study also examines problems in measuring other affective variables, the value of various measures found in the literature to assess these dimensions, and the decision-making process involved in reaching operationally defined behavioural categories used in the current study. Many researchers maintain that children with emotional and behavioural difficulties are not adequately described by a single set of characteristics (Cooper, 1996b; Daniels et al., 1999; DiEE, 1998; Rock et al., 1997). This is also discussed.

Problems encountered in defining 'social skills', 'co-operative learning' and 'cognitive behavioural' interventions are also explored.

The overall significance of this study is that it focuses on three separate interventions of social skills, co-operative learning and a cognitive behavioural intervention of positive self-referent verbal statements designed to enhance self-esteem for children with emotional and behavioural difficulties in an actual classroom situation. To date, there is little research data on interventions carried out to enhance the self-esteem of children who exhibit emotional and behavioural difficulties (Daniels et al., 1999). This study is significant as it attempts to address this deficiency.
1.8. **Key Research Questions**

This study examines two main research questions. They are:

What impact do three different types of intervention have on

1a self-rated self-esteem

1b observed behaviour in a free-time session

What impact do three different types of intervention have on:

2a self-rated locus of control

2b self-rated peer relationships

2c overt self-esteem as rated by teachers and care staff

2d overt behaviour as rated by teachers and care staff

Each research question will be addressed in a separate section.
CHAPTER 2

REVIEW OF THE RELATED LITERATURE ON CHILDREN WITH EMOTIONAL AND BEHAVIOURAL DIFFICULTIES AND THEIR SELF-ESTEEM

2.0. INTRODUCTION

Chapter two is divided into three main sections. The first section will examine the history of the classification of children with emotional and behavioural difficulties, followed by a discussion on the problems of the definition of children with emotional and behavioural difficulties. The second section will examine the history of the concept of self, followed by the theoretical importance of the self-concept. The third section will examine the evidence for children with emotional and behavioural difficulties having low self-concept.

2.1. THE HISTORY OF CLASSIFICATION OF CHILDREN WITH EMOTIONAL AND BEHAVIOURAL DIFFICULTIES

The literature on the identification and placement of children with special educational needs has a long history of wrestling with the theory and practicalities of exceptional child classification, placement and treatment. It is beset by pervasive debates and disagreements about definition, diagnostic criteria, assessment practices and/or intervention procedures (Daniels et al., 1999; Rock et al., 1997).
The 1944 Education Act gave an educational definition of what we today would term emotional and behavioural difficulties. This used the following definition of ‘maladjustment’:

‘Pupils who show evidence of psychological disturbance or emotional instability and who require special educational treatment in order to effect their personal, social or educational readjustment’.

This definition reflects a medical model of thinking but also makes reference to personal and social education that has always been a feature associated with children with emotional and behavioural difficulties. Children labelled ‘maladjusted’ in mainstream schools were only identified through an arbitrary process before the final implementation of the 1981 Education Act in 1983. The Underwood report (1955) urged more community-based approaches and the creation of more day special schools but children with serious emotional and behavioural difficulties tended to be channelled through child guidance to residential maladjusted schools (Daniels et al., 1999).

The Warnock Report (DES, 1978) formally recognised a group of pupils in schools who had ‘emotional and behavioural disorders’. Prior to 1978, the term ‘maladjusted pupil’ was widespread, being adopted as a description in important educational legislation. The Warnock Committee decided that the term was a useful one, and its use remained long after the 1981 Act.

A frequently encountered, and some would say continuing problem, of those seeking to arrive at workable definitions in the field of human behaviour, is assessment-subjectivity. However, the 1981 Education Act did not recognise the term ‘maladjustment’, a description which many workers in the field had long regarded as useful as it indicated a dysfunction between the individual and the society around him.

The Elton Report (1989) emphasised a whole school approach to children with SEN. It also made links between learning and behaviour, with the connection between
behaviour and learning recognised and continuing within the Code of Practice (DfE, 1994).

In the Elton Report children with emotional and behavioural difficulties were defined as children who 'set up barriers between themselves and their working environment through inappropriate, aggressive, bizarre or withdrawn behaviour and who have developed a range of strategies for dealing with day-to-day experiences that are inappropriate and impede normal personal and social development and make it difficult for them to learn' (DES, 23/89, 1989b).

The publication of Circulars 8-13/94 recognised emotional and behavioural difficulties as a special educational need. However, they are littered with terms which attempt precise description, but almost invariably result in added confusion. The phrase 'pupils with problems' is a case in point, for as has been long acknowledged, what for one teacher can present as an unmanageable and 'disruptive' activity can be regarded as 'normal' behaviour for another. This is hardly surprising, given that the terms 'emotion' and 'behaviour' are amongst the most difficult concepts in the educational lexicon (Garner & Gains, 1996).

DfE 9/94 stated: 'There is no absolute definition' (p. 4) of emotional and behavioural difficulties, then 'officially' classified these children as having problems that range from 'social maladaptation' to 'abnormal emotional stress'. Problems were described as persistent, if not permanent, and constituted 'learning difficulties'. They may be multiple and may manifest themselves in many different forms and severity. They may become apparent through withdrawn, passive, depressive aggressive or self-injurious tendencies. Although these children cover the range of ability found in mainstream schools, they behave in an 'extreme fashion'. Their behaviour may be apparent at the personal level (low self-image, anxiety, depression or withdrawal, or vindictiveness and defiance); verbal level (silence, swearing, arguing and interrupting);
non-verbal level (clingingness or aggression or violence) and at the work skills level (unwilling to work unsupervised or follow instructions). It is also thought that emotional and behavioural difficulties may be shown through withdrawn, depressive, aggressive or self-injurious behaviour and have a single or a number of causes, and may be associated with school, family or other environments or physical or sensory impairments.

The circular DfE 9/94, also maintains that emotional and behavioural difficulties are accompanied by a loss of self-esteem, and the child's learning should be structured to positively enhance self-esteem. Apparently improvements in pupil behaviour are likely to follow if self-esteem is enhanced (p.11). Later in the same circular it is stated that 'There are various definitions of emotional and behavioural difficulties, with emotional and behavioural difficulties said to lie on a continuum between behaviour that challenges teachers and that which is indicative of mental illness' (p.7). Whether or not a child has emotional and behavioural difficulties depends upon the 'nature, frequency, persistence, severity or abnormality and cumulative effect of the behaviour, in context, compared to normal expectations for a child of the age concerned' (p. 4). Perceptions as to whether a child's behaviour constitutes an emotional and behavioural difficulty are likely to 'differ according to the context in which it occurs as well as the individual teacher's management skills, tolerance levels, temperament and expectations' (p.9).

The DfE Circular 9/94, has had a big impact in framing current perceptions of emotional and behavioural difficulties. The Circular returns to a definition that is close to the Underwood report (1955) and restores the full spectrum of emotionally and behaviourally disturbed behaviours including those that are not disruptive or intrusive. Section 2 of the circular gives a model of emotional and behavioural difficulties that is said to lie between:

'behaviour which challenges teachers but is within normal, albeit unacceptable, bounds and that which is indicative of serious mental illness. The distinction
between normal but stressed behaviour, emotional and behavioural difficulties, and behaviour arising from mental illness is important because each needs to be treated differently.’ (Section 2, 9/94).

The Code of Practice (DfE, 1994) identifies emotional and behavioural difficulties as one criterion for learning difficulties according to the definition given in the Code. A wide variety of causes of these difficulties is outlined, including those outside and inside the school. Socio-economic factors are not mentioned, but abuse and neglect are (p.58). The concept of a continuum of difficulties is mentioned in relation to a circular ‘The Education of Children with Emotional and Behavioural Difficulties’ (DfE, 1994, p.59).

In the later DFEE (1997) document ‘Excellence in Schools’ a distinction is made between emotional and behavioural difficulties and disaffected behaviour, stating that the latter is predominant and is swamping resources intended for the former. No mention is made of the AD/HD diagnosis, until a 1998 DfE circular ‘A Plan of Action’.

2.2. THE PROBLEMS OF DEFINITION OF CHILDREN WITH EMOTIONAL AND BEHAVIOURAL DIFFICULTIES

Notwithstanding that all the subjects in this study were labelled EBD and attended a Local Authority residential school for children with emotional and behavioural difficulties, it is important that we examine this group in more detail. Children with emotional and behavioural difficulties at Bridgeview School have an established pattern of behaviour characterised by the following:

- require a very high level of overt supervision and/or direction in both academic and social domains
- an inability to learn which cannot be adequately explained by intellectual, sensory or health factors which disrupts their own and or others education
• have an inability to initiate, build or maintain satisfactory interpersonal relationships with peers, teachers and other adults

• display persistent situationally inappropriate behaviour, characterised by bouts of passive/aggressive responses to normal situations in school and at least one other setting

• are resistant to affective and or behavioural change

• display deficits in pragmatic language (the functional use of language for social communication) such as difficulties in turn-taking in conversation, sensitivity to tone of voice and the reading of non-verbal cues such as gestures and facial expressions

The above emotionally based characteristics are of sufficient duration, frequency and intensity compared to peers of a similar age, as to significantly interfere with their educational and social progress so that provision of special education is required. In order to ascertain whether this supposedly discrete targeted group of EBD students represents a truly emotional and behaviourally disturbed subset, it is necessary to examine and explore the classification literature for this group in relation to other subsets of supposedly 'discrete' groups of children.

Rather than just assuming that the group under investigation were all 'EBD', even though they were all labelled as such by virtue of the fact that they all attended a residential special school for emotionally and behaviourally disturbed children, it is perhaps worthwhile to explore this topic in more detail. In defining, clarifying and understanding the subjects of this study it may be useful to take a little time to examine the literature on classification of other groups of children labelled as 'special', 'exceptional', or 'learning disabled' etc. In particular the questions as to what precisely constitutes an EBD population and whether the current study had such a 'pure' group of
students are highly pertinent for many reasons. Not least are the questions of
generalisation and transferability of the results of the studies. Knowing, or not knowing,
as the case may be, whether they are or ever can be correctly identified may throw some
small light on the eventual findings.

As well as examining in depth the continuing controversy surrounding exactly whom
this student population represents, how they differ from normal populations and other
supposedly discrete subdivisions, the associated problems involved in operationally
defining each group's common characteristics are discussed, explored and closely examined.

Children with emotional and behavioural difficulties have been identified as a
discrete group or entity within SEN in general (Warnock Report, DES, 1978; Pupils with
Problems, DfE, 1994; Excellence in Schools, DFEE, 1997). However, Daniels et al.
(1999) have stressed the widespread, interchangeable and inappropriate use of a broad
range of terms to describe children with emotional and behavioural difficulties,
indicating the need for an examination of the research evidence in order to more closely
refine the definition of emotional and behavioural difficulties.

Teachers' perceptions of emotional and behavioural difficulties are dominated by
what Maras (1996) entitles 'off the wall' emotional and behavioural difficulties. This is
a reference to persistently disruptive behaviour that concentrate on the absence of the
'emotiona/ in working definitions of emotional and behavioural difficulties. This
'blindness' to the affective component coincides with a preoccupation with disruptive
behaviour on the part of teachers (Greenhalgh, 1994). This has implications for the
definition of emotional and behavioural difficulties because it is becoming increasingly
realised that some teachers are more successful than others at maintaining order in the
classroom, and therefore sometimes teachers themselves are the cause of children's poor
behaviour.
Other sources of problems with definitions of emotional and behavioural difficulties are issues of equity (Maras, 1996) such as the significant absence of girls' behaviour and the disproportionate number of black and Asian pupils described as having emotional and behavioural difficulties. However, in some parts of the country there was a possible under-representation of black pupils in schools for children with emotional and behavioural difficulties (Cole et al., 1998). Although definitions of emotional and behavioural difficulties are defined by professionals, pupils also have a part to play in so far as they view their relationship with teachers. Some pupils rated individual teachers and teaching styles as the principal cause of their disruptive behaviour and truancy (Daniels et al., 1999).

Daniels et al. (1999) maintain that the very abundance of terms to describe children with emotional and behavioural difficulties is a source of potential confusion. For example they cite Garner and Hill (1995) who define 'challenging behaviour' as:

'behaviour which prevents children's participation in educational activities; isolates them from their peers; affects the learning and functioning of other pupils; drastically reduces their opportunities for involvement in ordinary community activities; makes excessive demands on teachers, staff and resources; places the child or others in physical danger; and makes future placement difficult'.

Daniels et al. (1999) maintain that this definition could just as easily be used to describe 'problem behaviour', 'disruption', or 'behavioural difficulties'.

Definitions of emotional and behavioural difficulties continue to be debated and are sure to evolve in the future. Cooper & Ideus (1995) and Cooper (1996b), for example, reflect the increasing interest in Attention Deficit Hyperactivity Disorder highlighting the possible biological/neuro-physiological basis of some behaviour. However, much of emotional and behavioural difficulty is seen by some researchers as behaviour that is relative and context specific (Daniels et al., 1999).
In summary, therefore, it can be seen that the real problem with classification systems in psychology and psychiatry is that they are based on criteria agreed upon by professionals and politicians but the criteria change over time because the opinions and beliefs of professionals and politicians also change over time. The only consistent characteristics of classification criteria are the tendency to expand existing ones rather than combine or delete them.

2.3. OVERLAP AND CO-OCCURRENCE BETWEEN EMOTIONAL AND BEHAVIOURAL DIFFICULTIES, SPECIAL NEEDS, LEARNING DIFFICULTIES AND ADHD

A number of paradoxes can be found in the literature on children with emotional and behavioural difficulties, ADHD and learning difficulties, collectively labelled as 'mildly handicapped' by some authors. It is possible to find the view that these children can be just about any student someone wishes to diagnose as such. Some educators recommend less mainstreaming whilst others total mainstreaming, with both camps citing as evidence the lack of achievement of mildly handicapped students in their respective settings. Commonly used assessment and instructional methods are sharply disputed, with some scholars claiming these are essential whilst others suggesting they are irrelevant, unreliable and invalid, or limited and superficial.

Today there is a growing realisation that there is an overlap and co-occurrence between emotional and behavioural difficulties, ADHD and learning difficulties (Place et al., 1999; Rock et al., 1997). This is termed 'comorbidity' which is defined as the presence of multiple or co-existing disorders or conditions and is quite common in childhood psychopathology. In sharp contrast, a learning disorder is often viewed as a
single classification distinction (Rock et al., 1997). It is important to note, however, that
they are by no means the same.

The first quantitative descriptions of general population comorbidity between
classes of child and adolescent psychiatric disorders appeared only in 1987, but since
then the number has increased exponentially (Angold, Costello & Erkanli, 1999).

Earlier studies, such as Sherry & Algozzine, (1981) reported the results of studies on
the difference between behaviourally disordered, learning disabled and educable
mentally retarded students observed in the classroom settings. They found no difference
between the problem behaviour of the groups. Reschly in (1987), suggested that the mild
disability categories of learning disability, mild or educable mental retardation and
emotional disturbance should be combined as researchers could not distinguish
emotional characteristics or learning variables in populations compared. Characteristics
that were common to both groups were deficits in executive function, hyperactivity, poor
social skills and inattention. In fact, Smith Wood & Grimes (1987) maintained that none
of the disability labels defines an exclusive or ‘pure’ group of students. The Elton
Report, (DES, 1989) suggested that the three groups of ‘mildly handicapped’ children
are part of a continuum, varying in extent and severity of disability rather than having
discrete disabilities. Bender (1987) found that 38%-75% of children with serious
emotional problems also have LD (and between 24% and 52% of LD populations have
clinically significant social, emotional and behavioural problems). Other researchers
have found between 38% and 75% of children and adolescents with emotional and
behavioural difficulties have serious learning disabilities or severe learning problems
(Duchnowski, Johnson, Hall, Kutash & Friedman, 1993). Some researchers speculate
that these incidences may be even higher (Rock et al., 1997).

Rock et al., (1997) proposed a conceptual model involving six critical domains of
relevance to students with (concomitant) emotional and behavioural/learning difficulties.
These complex multiple learning and behaviour problems are divided into the six areas of:

- cognitive processing
- executive functioning
- language functioning
- behavioural functioning
- social/emotional adjustment
- academic performance

Children with complex multiple behavioural and learning problems are seen to have impairments in at least two of the six critical domains, which are seen as overlapping. The child with concomitant LD/EBD manifests problems that (a) occur in two or more of the critical functioning domains, including academic and either social/emotional adjustment or behavioural functioning; (b) are each of such severity as to be considered clinically significant in themselves; (c) interact to substantially impair functioning in school and/or the community; and (d) may be compounded by difficulties in addition that may or may not be clinically significant. There are multiple interconnections among the deficit areas. This model illustrates the problem of trying to remediate the multiple problems of one supposed condition EBD by attempting one intervention and demonstrates the need to apply a combination of interventions to ameliorate problems for these children.

Rock et al. (1997) when commenting on various studies in support of their model, speculate that poor self-concept could be negatively affected in these groups, caused by a combination of concomitant problems. A significant proportion of the children at Bridgeview School have not just ‘at least two’ but most, if not all, of the problems described in each of Rock et al.’s six critical domains. Therefore, we would expect them to have exceedingly low self-esteem based upon the above reasoning. However, the
author found that it is not possible to determine, using Rock et al.'s model, whether the categories of emotional and behavioural difficulties and learning difficulties are indistinguishable from one another at Bridgeview School. This is because no children are admitted to Bridgeview school on the grounds of Learning Difficulties alone. The value of Rock's model is in confirming the high level of deficiencies and disturbance displayed by children at Bridgeview School in virtually all six critical domains.

Children at Bridgeview School clearly have deficits in virtually all of Rock's categories. This has implications when comparing these studies to findings of self-esteem in other populations of normal, learning disabled, and emotional and behaviourally disturbed children, all labelled as having 'mild disabilities' (Gresham & McMillan, 1997). The author contends that the population in the current study represents a 'hard core' of children with emotional and behavioural difficulties.

AD/HD is a diagnosis created by the American Psychiatric Association with 3-5% of American children and approximately the same number in this country thought to be affected. Unfortunately there are problems with the validity of the definition of ADHD in Britain and the USA. There are also disputes as to the comorbidity of EBD and AD/HD both within and between the two countries.

The British definition of AD/HD is very similar, but not identical, to that used in the USA. Cooper (1996a) maintains that the focus of AD/HD is entirely on behaviour, with an important part of the treatment being stimulant medication. Children with AD/HD are often of average to high ability with erratic classroom achievement and frequently operate below their apparent level of ability (Cooper & Ideus, 1995). Their classroom behaviour is often marked by some or all of the following: being out of their seat too frequently; deviating from what the rest of the class is supposed to be doing; not following the teacher's instructions; talking out of turn or calling out; being aggressive towards classmates; having a short attention span and being easily distracted; bothering
classmates by talking to them or intruding on their work; being oblivious and
daydreaming; losing and forgetting equipment; handing in incomplete or sloppy work.
Although these problems are experienced by many children from time to time, especially
those labelled EBD, the child with ADHD experiences them on a chronic and persistent basis. According to Cooper & Ideus (1995) the constant failures associated with the condition have the added disadvantage of depressing the child's self-esteem.

Distinguishing features of the ADHD condition are that:

• it is thought to be a lifelong condition

• it has a biological basis (probably caused by dysfunction in the neurotransmitters in the frontal lobes of the brain)

• it focuses entirely on behaviour; an important part of the treatment is stimulant medication.

However, there are recognised similarities between children with emotional and behavioural difficulties and Attention Deficit (Hyperactivity) Disorder (ADHD). For example, Barkley (1994), found a considerable overlap between EBD and AD/HD with 40% of the children categorised as having emotional and behavioural difficulties also qualifying for the AD/HD diagnosis. Similarities are also distributed across gender (3 boys: 1 girl). Also, over 60% of ADHD children exhibited oppositional and defiant behaviour, over 45% displayed conduct disorder, over 25% were anti-social or delinquent, up to 30% had anxiety disorder and up to 33% had major depression. Over 50% had emotional and social skills problems and over 90% were unproductive in their school work with 25-35% having learning difficulties. It can be seen that in the U.S., the ADHD definition would encompass a great many children in this country that are termed EBD. Therefore, it is possible that the current study could have implications for some children diagnosed/labelled as having ADHD.
Place et al. (1999) in their study looked at a group of children whose behaviour had prompted placement in a school for emotionally and behaviourally disturbed children and found the overall rate of psychiatric disturbance in the group was 86% and, in particular that the rate of ADHD was 70%. These findings suggest that a significant minority of disruptive pupils may have their difficulties compounded by the presence of ADHD.

In a recent two-stage study by Bussing, Zima, Belin & Forness, (1998) into whether children who qualify for LD and SED programmes differ in level of ADHD symptoms and comorbid psychiatric conditions, they found that children at risk for ADHD did not differ in symptomatology or comorbidity by special educational programme.

Some practitioners (O'Brien, 1996) are sceptical of the diagnostic criteria of ADHD whilst others question its actual existence as a 'condition' and are particularly concerned with the ever increasing prescription of the 'wonder' drug Ritalin (methylphenidate). Tannock, (1998) suggested that ADHD is fundamentally misunderstood after she assessed children on a battery of tests to measure their reaction times, finding 'these kids are ubiquitously slow.......it doesn't fit the picture of hyperactivity and impulsivity'. However, Kuhne, Schachar & Tannock, (1997) found evidence of distinctive profiles of 'disruptive behaviour disorder groups' and the expressed need for syndrome specific interventions.

It is sensible, therefore, to interpret the current research and knowledge base with a considerable degree of caution, until more definitive studies are carried out, because, as has been mentioned elsewhere, these problems impact on research studies, making comparisons between populations difficult and could go some way to explain conflicting results in some studies of supposedly 'discrete' populations.

However, it is very important to stress once again that this does not mean children with emotional and behavioural difficulties and/or children with learning difficulties are,
or can be seen as, the same discrete group - only that they share some common characteristics to varying degrees.

2.4. PROPONENTS OF CATEGORISATION

Not all researchers and practitioners are opposed to categorisation. Some researchers maintain that categories do have uses. For example, opposition to non-categorical approaches were voiced by Cooper, (1996b) who claimed that teachers need to have an in-depth understanding of children's problems and their aetiology for them to be effective. Rock et al., (1997) stated aetiology is not 'unimportant' in order to:

- programme effectively
- identify factors influencing outcomes
- begin to identify patterns in symptomology related to aetiology,
  developmental course and prognosis

Problems can arise if children from different diagnostic categories do not mix appropriately when placed in the same resource room or special class. Furthermore, non-categorical approaches encourage the practice of inappropriate placement of children who are having difficulty in school but who are not diagnosed as having a disability. The movement to 'delabel' will not be effective because people will continue to use the categories to label/describe children regardless.

However, all too often teachers complain that many of the diagnoses performed by psychologists and physicians seem irrelevant for instructional purposes (Garner & Gains, 1996; Cooper, 1996b). They argue for categorising behaviour rather than individuals. At present the common way of identifying subjects for research on emotionally and behaviourally disturbed children is to simply study the children who have been placed in classes for emotionally and behaviourally disturbed students.
Garner & Gains (1996) also suggested that a focus on the definition of emotional and behavioural difficulties can be problematic as definitions tend to be used in a negative deficit-laden way, but nevertheless they propose a model of intervention based on a behavioural, psychodynamic and ecosystemic approach.

Cooper (1996b), whilst admitting that there are problems with categories of 'difficulty' that tend to be negative, focusing on deficiencies and deficits, emphasising what individuals cannot do and providing reasons for exclusion from activities that are reserved for 'normal' individuals, does not dismiss them entirely. Using comprehensive categorical language for describing emotional and behavioural difficulty problems will enable teachers to:

• bring clarity to accounts of emotional and behavioural difficulties in reports, records and information to pupils and parents

• develop conceptual frameworks for thinking about the range and nature of problems

• recognise and discuss common patterns of problems and ways of dealing with them

• recognise when problems may indicate need for input from professionals from other disciplines such as medical and social workers

Cooper admits that the emotional and behavioural difficulties descriptor alone, because of its all-encompassing nature, is virtually no use at all as a descriptor for specific problems and suggests a 'typology' in order to 'identify the range of emotional and behavioural difficulties that are likely to influence educational performance and to locate this within a framework which offers a sense of aetiology and directions for locating appropriate responses' (p.148).

His typology is a bio-psycho-social approach and takes into account the debate on individual pathology versus environmental explanations of the aetiology of emotional and behavioural difficulties. The model also allows for the influence of possible genetic predispositions. Categories are also differentiated into externalising and internalising
behaviours; the former are described as patterns of behaviour and manners of self-presentation that are experienced by others as being disruptive, antisocial and/or confrontational. The latter are not so much disruptive as disturbing to others. Not all children classified as having emotional and behavioural difficulties have similar problems and therefore require similar treatments so the label emotional and behavioural difficulties is a 'umbrella term' and can be viewed in a similar vein to self-concept (Cooper, 1996b). Cooper’s typology is shown below in Figure 1.

**FIGURE 1 COOPER’S TYPOLOGY OF EMOTIONAL AND BEHAVIOURAL DIFFICULTIES**

Cooper’s typology of some common emotional and behavioural difficulties that may lead to serious underfunctioning in school and impairment in social relationships (Adapted from Cooper 1996b).

<table>
<thead>
<tr>
<th>Bio-Psycho-Social</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Externalising</strong></td>
<td><strong>Disaffection</strong></td>
</tr>
<tr>
<td>Conduct disorder</td>
<td>Delinquency-Oppositional-defiance</td>
</tr>
<tr>
<td>Attention deficit/Hyperactive disorder (mainly hyperactive type/mixed type)</td>
<td></td>
</tr>
<tr>
<td>Autism/Asperger</td>
<td></td>
</tr>
<tr>
<td>Tourette’s disorder (syndrome)</td>
<td></td>
</tr>
<tr>
<td><strong>Internalising</strong></td>
<td><strong>Truancy and school refusal</strong></td>
</tr>
<tr>
<td>Separation anxiety-Withdrawn behaviour</td>
<td></td>
</tr>
<tr>
<td>Elective/selective mutism</td>
<td></td>
</tr>
<tr>
<td>Attention deficit/Hyperactive disorder (mainly inattentive)</td>
<td></td>
</tr>
<tr>
<td>Substance misuse/abuse Anxiety disorders</td>
<td></td>
</tr>
</tbody>
</table>
According to Cooper (1996b) the purpose of his draft typology is to identify the range of EBD that are likely to influence educational performance and to locate this in a framework which offers a sense of aetiology and directions for locating appropriate responses, with the overarching framework being a bio-psycho-social approach.

It is possible to see similarities and differences between the models of Rock et al. (1997) and Cooper's (1996b) draft typology. Both, for example attempt to give explanations as to the aetiology of children with emotional and behavioural differences. Rock et al., maintains emotional and behavioural difficulties are a product of a comorbidity of factors in six critical domains, whereas Cooper maintains a typology between children with emotional and behavioural difficulties is possible based on two major types - externalisers and internalisers.

Externalisers and internalisers are sufficiently discriminated, according to Cooper, as to provide subcategories within each, based on psychosocial, bio-psycho-social and mainly psychological factors.

Rock et al. (1997) however maintain that discrete categories are to be discouraged as children with emotional and behavioural difficulties can have a multitude of potential manifestations and developmental courses which are in concordance with the described heterogeneity of this population. There are 'thousands' of specific deficit combinations that could fall under the rubric of concomitant learning and behaviour disorders. Their model reflects the problems affecting students with concomitant disorders and illustrates the interactional, multidirectionality and synergistic effects of disabilities on children, and therefore is probably more powerful than Cooper's model in identifying and intervening with children who have emotional and behavioural difficulties. Rock's model is dynamic whereas Cooper's model looks static by comparison.
This section examines the research on a subgroup of children within the category of emotional and behavioural difficulties who are divided into either internalisers or externalisers (Cooper, 1996b; Gresham et al., 1998).

Recently, Gresham et al., (1998) have focused on another 'subgroup' of children demonstrating externalising behaviour patterns, who they believe are at risk of a number of pejorative outcomes such as reading difficulties, peer rejection, classification and placement in special education classrooms as seriously emotionally disturbed, arrest and incarceration and school dropout. Lynam, (1996), termed these children 'fledgling psychopaths'.

These children with emotional and behavioural difficulties exhibit a pattern marked hyperactivity-impulsivity-inattention coupled with conduct problems characterised by fighting, stealing, truancy, noncompliance and arguing and would be considered at risk of the comorbid diagnosis of attention deficit/hyperactive disorder (ADHD) and conduct disorder/oppositional defiant disorder (Gresham et al., 1998).

Two principle subcategories of childhood psychopathology which have been identified. These are internalising emotional problems (IEP) and externalising emotional problems (EEP). The first subcategory (IEP) includes forms of psychopathology characterised by inhibition, social withdrawal, shyness, anxiety, depression and problems 'within the self'. The second subcategory (EEP) includes psychiatric conditions characterised by hostility, oppositional behaviour, aggression and acting out against the environment or society. These two factors were found to be consistent across samples differing in sex, age and sociometric status. Further differences between the two groups have been found. For example, externalisers have significantly greater involvement with the police and courts, are expelled from school more often and do less well academically (Versi, 1995).
Although there is a lack of conclusive evidence, some long-term studies (Gajar, 1979) did find evidence of real differences amongst categories, although he found that it was more difficult to accurately identify emotionally disturbed populations, as is still the case today. There was also some evidence that the differences in categories became more obvious as the severity of the student's disability increased and that emotionally disturbed students may have complex behavioural disorders or personality problems that require extensive behaviour modification or psychotherapeutic treatment (Versi, 1995).

Versi, (1995) found a differential treatment effect showing that externalising students were significantly more responsive than internalising students to teacher ratings of student social competence and school adjustment. However, students' social skills ratings were not affected. Frankel & Myatt, (1996) examining social competence, found that externalising behaviour was positively related to self-esteem with male 7-12 year olds who had difficulty making friends and a review by Lynam, (1996) indicates that such children are at an even greater long-term risk of poor outcomes. A longitudinal investigation by MacDonald and Achenbach (1996) showed that children having attention problems combined with conduct problems are at great risk of developing severe and persistent antisocial behaviour into at least early childhood (aged 22 years).

Hindshaw (1994) in his review stated 'children having the combination of hyperactivity/inattention and conduct problems/aggression tend to have the worst features of both domains, particularly regarding observed behaviour, peer status and outcome' (p.458).

The prognosis for children having an 'externalising' behaviour pattern, with emotional and behavioural difficulties, particularly for students who are highly aggressive, is not positive. As long ago as 1979, Olweus found that measures of aggression were as stable as measures of intelligence over a ten-year period, with early onset being the best indicator of long-term persistent conduct problems and aggression
More recent work by Walker Colvin & Ramsey (1995) has shown that these children exhibit antisocial behaviour patterns that are characterised by aggression, hostility and violation of social norms. This antisocial behaviour is so resistant to intervention that no less a luminary and authority than Kazdin (1987) suggested that after about grade 3 (8 years old) an antisocial behaviour pattern should be viewed as a chronic condition that cannot be 'cured,' but rather controlled and managed (e.g. diabetes) with appropriate interventions and supports. In a longitudinal study of clinic-referred and controlled males, Robins (1966, cited in Gresham et al., 1998) found thirty years later: 'not only were antisocial children more often arrested and imprisoned as adults, as expected, but they were more mobile geographically, had more marital difficulties, poorer occupational and economic histories, impoverished social and organisational relationships, poorer Armed Service records, excessive use of alcohol, and to some extent poorer physical health' (p.68).

2.5. APPROACHES TO TEACHING EMOTIONALLY AND BEHAVIOURALLY DISTURBED CHILDREN

The real test of whether children with emotional and behavioural problems are having their specific needs met is what happens in the classroom. Unfortunately, there is a general lack of research evidence that specific teaching methods are differentially effective with heterogeneous samples of children and failure to demonstrate that particular teaching strategies and materials are effective for one category as opposed to another. Indeed, in many cases, methods that are effective for some students within a diagnostic category are not effective for others within the same category and there is no simplistic correspondence between behavioural problems and specific interventions.
However, certain kinds of problems suggest certain kinds of approaches as a first resort (Lago-Delello, 1998).

There are three broad paradigms (a shared set of assumptions about the subject matter of a discipline, and the methods appropriate to its study) for learning in education, which are founded on specific epistemological assumptions. These are the philosophies of Behaviourism, Cognitive Theory and Constructivism.

Behaviourism

Behaviourism argues that learning takes place through a mechanism of stimulus and response. Both stimulus and response are manifest and therefore measurable, and offer an empirical legitimacy to the 'soft' science of education. The operant conditioning of Skinner (1974), focuses on consequences (reinforcement) as a means of shaping behaviour has led to the development of tangible guidelines for learning strategies such as the focus on incremental learning and the need for consequences to be intermittent and timely (Slavin, 1991).

Behaviourism was the predominant instructional paradigm for the first half of the twentieth century and is firmly rooted in the positivist, objectivist tradition. The views stem from 'hard' science and maintain that "knowledge is hard objective and tangible" (Cohen & Manion, 1989). It has its intellectual roots in an objectivist epistemology that holds that knowledge is based on some reality that is external to the learner and that all learners can come to know that reality in pretty much the same way. Behaviourism relies almost exclusively on observable behaviour and does not consider individual thought processes, which involve internal conceptual change within the learner.

The decline in adherence to behaviourism was not that classical conditioning, operant conditioning and imitation do not exist but that behaviourism makes the mistake of thinking that these three learning processes could explain all learning.
Watson (1913) stated:

'Psychology as a behaviourist views it is a purely objective branch of experimental science. Its theoretical goal is the prediction and control of behaviour. Introspection forms no essential part of its methods, nor is the scientific value of its data dependent upon the readiness with which they lend themselves to interpretation in terms of consciousness'.

This behaviourist approach holds that learning occurs by changing the behaviour of the learner 'so that if we control the behaviour of the learner, we also control his or hers knowledge acquisition'. Behavioural learning theory 'is based on the premise that learning results from the pairing of responses with stimuli' (Hannafin & Peck, 1988).

The current study used the principals of applied behaviour analysis in order to ensure 'compliance' throughout the three interventions. Applied behaviour analysis (ABC) has as its guiding principal that behaviour (B) is controlled, not by its antecedents (A), but by its consequences (C). Behaviour is strengthened or maintained by reinforcement. Positive reinforcement has occurred when the presentation of a consequence maintains or strengthens behaviour over time, whereas negative reinforcement occurs when behaviour is strengthened or maintained if it avoids or terminates an aversive stimulus. Behaviour is weakened by removing the consequences that have been maintaining it, known as extinction, and by punishment. Again there are two classes of punishment. The first involves presenting an aversive consequence immediately after a response has occurred, and the second involves removing a positive consequence following a response. This differs from extinction because the consequence being removed is arbitrarily chosen rather than the consequence which maintains the undesired behaviour.
Behaviour is also strengthened, weakened, or maintained by modelling (Bandura, 1969).

Criticism of Behaviourism

A behaviourist approach is prescriptive in that it dictates what knowledge the students will learn, in what order they will learn it and how they will learn it. In addition, the use of behavioural objectives ensures that the learners concentrate on key points rather than considering the information as a whole. As links are not normally established between these objectives, knowledge gained would be fragmented which will also prevent the formation of an adequate mental model.

Cognitive Theory

Cognitive theory is concerned with the role of the learner in mediating learning and recognises the complex processes that mediate between the classical ‘stimulus’ and ‘response’. It has a strong emphasis on cognitive aspects such as stimulating recall of prior learning and enhancing learner retention, as well as behaviourist sequences of presenting stimuli and eliciting performance. It is also concerned with the broader tasks of problem solving and critical thinking.

Behavioural approaches have been criticised for being mechanistic and ignoring the internal world of the individual. Hull’s neo-behaviourism opened the door to cognitive psychology with its reliance on unobserved intervening variables.

Cognitive-behavioural practitioners accept the behaviourist principle that learning is the basis of behaviour but also emphasise the role of mental processes in determining the way individuals respond to their environment. These include perception, attention and memory, and attitudes, beliefs and interpretations of the environment.

Cognitive behavioural approaches assume abnormal behaviour is no different than normal behaviour—both develop through learning. Labelling is not necessary.
However, behaviour should be observed systematically so we can learn what the controlling factors are in the environment. Each person has his own unique learning history, being neither good, or bad. There is no such thing as free will, as we are controlled by our environment. In order to make changes we must ‘unlearn’ or change the environment, its reinforcers or their interpretation of them. Finally, interventions should be guided by the results of research and cognition.

Constructivism

Constructivism bases itself on the principles of cognitive theory. Constructivism goes beyond the study of how the brain stores and retrieves information to examine ways in which learners make sense from experience. Rather than transmission of knowledge, learning is an integral process of interpretation. Learners do not transfer knowledge from the external world into their memories, but create interpretations of the world based upon their interactions in the world. How someone construes the world, their existing metaphors, is at least as powerful a factor influencing what is learned as any characteristic of that world.

Whilst constructivism does not necessarily deny the existence of an objective reality, it rejects absolutism and denies the existence of an objective knowledge, as there is not a correct meaning we are striving for.

Most cognitive theory, and the constructivist approaches that have grown out of it, argued that learning should be durable, transferable and self-regulated.

Cognitive Constructivism is derived from the work of Piaget (1977) which defines learning as a process of accommodation, assimilation, and equilibrium. People learn by co-ordinating and constructing new, more adequate cognitive structures.

Social Constructivism, pioneered by Vygotsky, argued for the importance of culture and context in forming understanding. Learning is not purely and internal process,
nor is it a passive shaping of behaviours. Vygotsky favoured a concept of learning as a social construct which is mediated by language via social discourse.

Criticisms of Cognitive Theory and Constructivism

One of the most tangible criticisms of Social Constructivism is the type of learning it supports. According to Merrill (1997), while it may be true that social negotiation is a useful approach to achieving consensual understanding of ill-structured subject matter, even in the 'softest' subjects there is often a body of undisputed knowledge. Constructivist strategies are often not efficient, resulting in a trial and error approach to the performance in the real world. These philosophies are much less open to rigorous scientific testing inherent in a behaviourist paradigm. Epistemologically, the relativism of Constructivism is particularly contentious as it focuses on the individual interpretation of a perceived external reality.

Studies of children with emotional and behavioural difficulties in the classroom setting have produced mixed results. For example, Lago-Delello, (1998) in investigating the classroom dynamics of young children identified as at risk of developing 'serious emotional disturbance' as compared with 'not-at-risk peers' found that these children were experiencing 'a significant different reality' in the classroom as compared with not-at-risk peers and had significantly more problems with:

- teacher factors - they engendered negative teacher attitudes
- student factors – they spent significantly less time engaged in academic tasks
- instructional factors – they received significantly more negative or neutral and non-academic feedback statements

As a result of the study Lago-Delello recommended that in order to achieve effective classroom interventions for this group it is necessary to differentiate and change teaching methods for the children identified as at risk of the development of 'serious emotional disturbance' to collaborative/ consultational teacher models, task modifications, direct
instruction and co-operative learning and peer tutor programmes. However, he did find a willingness of the teachers to make instructional accommodations using peer support and changes in feedback procedures.

Kuhne, Schachar & Tannock, (1997) also expressed similar views. They examined the impact of comorbid oppositional or conduct problems on attention-deficit hyperactivity disorder and found evidence of distinctive profiles of disruptive behaviour disorder groups and the need for syndrome specific interventions.

Interestingly and perhaps even more telling was an observational study of thirty-eight classrooms containing the above three groups of students where Algozzine, Algozzine, Morsink & Dykes (1984) found the teacher behaviours did not differ by category of exceptionality.

Rogers' (1951) theories posited that 'unconditional positive regard' would lead to gains in self-acceptance and self-liking and there is considerable evidence to support the theory that a child's self-esteem can, for example, be improved by the teacher.

2.6. HISTORY OF THE CONCEPT OF 'SELF'

'The study of no aspect of humanity is so marked by muddled thinking and confusion of thought as this' (Rom Harre, 1998, p.8.).

Our current ideas of 'self' derive from the mix of philosophy and religion where such concepts as soul, will and spirit have been found in writings for over a thousand years. They originated with the philosophers of ancient Greece where 'Know thyself' was reputed to have been carved on the Delphic Oracle. From these imprecise terms it is possible to trace the ideas and beliefs that have led to our modern definitions and measurement of 'self'.
Homer, writing in the eighth century BC, and Plato in his Phaedo in the fourth century BC both saw the self as a non-physical host in a physical body. When the body died the soul left and resided in heaven. Although Aristotle speculated on the nature of the soul, the body and soul dichotomy was most marked with the advent and rise of Christianity. Descartes, in the seventeenth century, was the first philosopher to develop the distinction between self and self-concept. His cogito ergo sum (I think therefore I am) placed the self at the heart of consciousness. By the end of the seventeenth century a new and acceptable distinction between the dualism of content and consciousness had arisen. This would eventually lead to the modern differentiation between the self and self-concept.

Four main strands of thought that have influenced our thinking are:

1. The pioneering work of James
2. Symbolic interactionism of Cooley and Mead
3. Erickson on identity
4. Phenomenology of Rogers

William James

William James (1890) was one of the first investigators to elaborate on the dual nature of self-consciousness. He envisioned the self as both simultaneously 'I' and 'Me'. The I and Me were 'discriminated aspects' of the 'total self of Me' and 'not separate things'. Eventually he concluded that the difficulties of the self being simultaneously both Me and I necessitated the knower to be banished to the realm of philosophy.

James had less difficulty categorising his empirical self into four components of material, social, bodily and spiritual Me. In its widest possible sense the empirical Me was the 'sum total of all that he can call his, not only his body, and his psychic powers, but his clothes and his house, his wife and children, his ancestors and friends, his reputation and works, his land and horses, and yacht and bank account'.
The material me was an extended self which contains in addition to the individual's own body, his family and his possessions. The social me was the 'recognition which he gets from his mates'. James further contends that a man has as many different social selves as there are distinct groups of people about whose opinion he cares. This then leads to us having several selves leading to the possibility of 'discordant splitting' especially when we all have to behave differently depending on the circumstances. The spiritual me according to James was not one, but the entire collection of his states of consciousness, 'the very core and nucleus of our self.'

Each of the Me's aroused feelings and emotions of 'self appreciation' such as pride and conceit or modesty and shame which could prompt action that was either self-seeking or self-preservating. James also recognised that rivalry and conflict between the different Me's - bodily, social and spiritual, could combine to produce an overall picture of oneself, with each person experiencing different combinations. This led to the now famous James 'Law'.

\[ \text{Self-esteem} = \text{Success} \]
\[ \text{Pretensions} \]

James suggested that it is possible to choose one's position in the world. He contended that self-esteem depends upon the position one holds in the world, contingent upon success or failure. The person's aspirations and the outcome of his behaviour determine the level of his self-esteem. In a very famous passage James explains the principle of self-esteem.

'I, who for the most part stake my all on being a psychologist, am mortified if others know more than I. But I am content to wallow in the grossest of ignorance of Greek. My deficiencies there give me no sense of personal humiliation at all. Had I 'pretensions' to be a linguist, it would have been just the reverse' (p. 187).
This 'Law' finds reflection in many of our current definitions of self-esteem, self-concept and self-image. These differentiations of self are still in use today where multidimensionality of self-esteem is measured in various dimensions. For example, Battle (1992), Coopersmith (1967), Piers Harris (1969), Harter (1988) and Marsh et al., (1995).

Behaviourism

In the earlier half of this century the rise of behaviourism stopped any attempts to put the concept of self at the heart of psychological theory. It emphasised operationally defined observable phenomena and there was little room for theorising on self.

Nevertheless, behaviourism did have a positive effect on the study of self. The 'global' self, for example, was operationally defined as the discrepancy between the extent a person feels positive or negative about himself. It was possible to postulate hypotheses that were capable of being tested through experiment and the rigorous application of statistics. Behaviourism, in fact, strengthened and refined self-theory.

Symbolic Interactionism

Prior to James and Freud it was assumed that the relationship between an individual and society was of an independently existing individual interacting with society. The individual pre-dated society. Symbolic interactionists, such as Cooley (1902) and Mead (1934) however, inferred that it was impossible to separate individuals from society as causality is indeterminate. Three basic principles characterise symbolic interactionism:

- individuals respond to their environment on the basis of meanings that elements of the environment have for them as individuals
- meanings are a product of social interaction
- societal and cultural meanings are modified through individual interpretation
Behaviourism and phenomenological theory, although presenting differing views on man, and each with distinct methodologies, support each other in their goal of understanding of self.

Cooley

Cooley (1902) as a sociologist stated ‘self and society are twin born... and the notion of a separate and independent ego is an illusion’ (p.5). Cooley concentrated on the Me and not the I. He was the first to propose a developmental theory and introduced the concept of the 'Looking glass self'. How others see us was thought to be of paramount importance. Therefore self-esteem is developmental and not a static component of personality.

Mead

Mead (1934) elaborated and extended Cooley's theory. He was in agreement with Cooley that self and society were intertwined and self arises out of the individual’s concern about how others see him. Mead suggests that the self is composed of many 'elementary selves' and each of us has many social identities such as husband or worker etc. Self and society were seen as inseparable. Again we are seeing the multi-dimensionality of selves.

Goffman

Goffman (1959) extended the concept of symbolic interactionism by suggesting that the individual puts on a 'show'. Short-term selves or social identities form the basis for cueing reactions to individual situations, providing clues for others to interpret. Self and society interact in short episodes with the individual shedding one costume then dressing up in another. Self becomes the total person, rather than just an objective Me.

Adler

Adler (1927) saw environment and hereditary as the basic elements of personality. An individual has his own personal 'lifescript' that determines how self is created. Adler emphasises the concept of 'lifestyle'. It is one's lifestyle that determines behaviour. In the
striving for self-actualisation through self-assertion the individual attempts to conquer his feelings of inferiority. Behaviour that otherwise may not make sense is understandable in terms of a drive to alleviate perceived inferiorities. Consciousness is at the centre of personality with man usually aware of the reasons for his behaviour.

Sullivan

Sullivan (1953) stated 'When I talk about the self system I want it clearly understood that I am talking about a dynamism' (p. 167). Exactly what he meant by this is unclear. It can mean describing certain habits to avoid anxiety and to represent a view of one's self. According to Sullivan the need to avoid unpleasant emotions motivates the self-system and the self is similar to defence mechanisms in so far as it guards against anxiety by selectively perceiving interactions from the environment. Early experiences interacting with the mother figure are vital in the formation of the self. It is here that internalised values, prohibitions etc. are organised into subsystems of the 'good' and 'bad' me.

Sullivan describes the self as a self-system, and is entirely learned as a result of interpersonal experience arising out of the anxiety encountered in the pursuit of need fulfilment.

Horney

Horney (1945) also saw the self-system arising out of anxiety. She thought disturbed human relationships cause individuals to adopt strategies to satisfy a neurotic need. Horney originally proposed ten needs, but later cut them down to three: moving towards, away, and against people.

In an attempt to reach self-realisation the individual erects a model of an idealised self and behaviour is modelled on this. An ideal self is an unobtainable goal, with attempts to reach it resulting in inner conflict reinforcing neurotic behaviour. Horney fails to clarify whether the individual is aware of the ideal self or how realistic it is to achieve. The essential difference between a normal and abnormal conflict is one of
degree, as Horney maintains that everyone to some extent experiences these conflicts. Individuals who have had, for example, unfortunate parental experience may encounter neurotic conflicts in an exaggerated form.

Lewin

Lewin's Field Theory (1936) dictated that all behaviour arises from a total field that is not the real 'field' but a field as the individual sees it. The phenomenologists Snyggs and Combs (1949) and later Rogers (1951) extended Lewin's ideas, and maintained that the concept of self arose from an individual's perception of reality rather than a supposedly objective reality held by all. Self is determined by the phenomenological field of the individual, developing and maintaining itself in a manner consistent with individual values, perceptions and experiences. Behaviour is therefore influenced not only by past and current experiences but by the personal meanings each of us attaches to the perception of those experiences. With phenomenologists the perception of reality, not reality itself, is of paramount importance.

Snyggs and Combs

Snyggs & Combs (1949) maintained 'all behaviour without exception is completely determined by and pertinent to the phenomenal field of the behaving organism' (p. 15). This consists of three concentric circles. The outer circle is all the individual's perceptions. Within is contained all those perceptions that a person holds about himself at any particular moment, and at the core is the stable self-concept containing all those perceptions that seem to be basically him. As the phenomenal field is the totality of experiences that one can have at any one moment, unconscious factors were superfluous.

Rogers

Rogers (1951) maintained that the self-concept was 'an organised configuration of perceptions of the self that are admissible to awareness. It is composed of such elements as the perceptions of one's characteristics and abilities: the percepts and concepts of the
self in relation to others and to the environment; the value qualities which are perceived as associated with experiences and objects; and goals and ideals which are perceived as having positive or negative valence’ (p.136).

The self was composed of three aspects; a real, ideal and a perceived self. The more congruent these are, the more adjusted the individual is. Much of current thinking on self-concept can be attributed to Rogers’ ideas. For Rogers the self becomes differentiated as part of the actualising tendency, from the environment, through transactions, particularly with the social environment. Although phenomenological theory is theoretically based on direct awareness and experience alone, Rogers did suggest an unconscious element. Self-actualisation was the dominant drive in attaining the ideal self by obtaining positive self-regard from others through liking, respect, sympathy and acceptance. Positive regard from others is learnt and internalised leading to positive self-regard, with individuals constantly checking their experiences of the environment against reality. 'Unconditional regard' is to be given to individuals so that they can set their own goals in life.

Allport

Allport (1955) coined a new phrase in an attempt to further the distinction between self and ego. This was the 'proprium'. He defined it as 'all the regions of our life that we regard as intimately and essentially ours' (p.38). His eight 'proprium' aspects were eventually reduced to seven. These proprium aspects were those which make an individual different from all others. He envisioned us as purposeful rational individuals who control our destiny through our aspirations. The seven hierarchical 'aspects' lead to maturity and were:

1. bodily sense - sensation;
2. self-identity through time - continuous existence;
3. self-enhancement - assertion of and love of oneself;
4. self-extension - identification with others and other things-mine;
5. rationality - planning, coping;
6. self-image;
7. propriate striving - motivated behaviour to enhance the self image.

By 'propriate' Allport (1955) meant 'central to our state of existence' (p.38). Allport agrees with Jung that we do not have a fully developed self until middle age at least. The mature person is an amalgamation of all the self-concepts gained in attaining adulthood. By describing the self as an aggregate of propriate functions, a factotum view of self as a homunculus (little man in the brain who pulls the strings of personality) is avoided.

Cattell

Cattell (1950) also saw the self as a key concept in personality. He identified a Felt Self, a Contemplative Self and a Structural Self. The Felt Self is introspective. The Contemplative Self is the totality of what a person believes and thinks he is, and what he would like to be. It is both the real and ideal aspects, composed of both wishes and oughts, inferred from behaviour and reported by introspection. The Contemplative Self is aware of social opinion. The Structural Self is both object and process and has similarities in line with James and Allport. It integrates id, ego and super ego into 'one dynamic structure or unified sentiment' (p. 230).

This sentiment of self causes the individual to pay attention to certain objects, or class of objects, and to feel and react in a certain way with regard to them' (p. 231).

Cattell postulates the importance of selective perception for the first time. He stresses the role of self as an integrating force in personality, a unifying thread on which all other sentiments are fixed. The self therefore organises personality traits, determines consistency among them and adds structure.
Erikson

Erikson's (1965) views on identity continued the accepted distinction between ego as subject - the central organising agency - and self as object, with self-identity emerging through experience. Erikson postulated that identity is obtained from 'achievement that has meaning in the culture' (p.228). It arises out of the gradual integration of all identities. Concepts are organised into roles which help each individual to relate to his/her environment. It is important for children to come into contact with adults with whom they can identify. Interestingly, he criticises self-conceptualisation, self-image and self-esteem, which provide a static view of what he sees as an evolving process 'for identity is never established as an achievement in the form of a personality armour, or of anything static and unchangeable' (1968, p.24).

Erikson proposed an eight-stage model of identity growth. Each stage has particular characteristic conflicts and through resolution of these conflicts, qualities in the individual emerge. Adolescence is a particular time of conflict.

Organismic theory proposes that each person is an organised system and cannot be studied by isolating particular elements in an atomistic fashion. An individual is assumed to be motivated by only one basic drive, that of self-actualisation. This is a singleness of purpose to realise inherent potentialities (Rogers, 1959).

Goldstein

Goldstein (1939) postulates that self-actualisation is a creative trend and although universal, takes a different form for each individual. Different individuals possess differing innate potentialities as well as different environments in which to adjust. Goldstein makes the somewhat dubious assumption that if one can discover what an individual does best then one's potentialities can be realised. Self-actualisation is realised by coming to terms with the environment which enables an individual to actualise.
Any particular need comes to the foreground when it becomes a prerequisite for self-realisation of the individual. This occurs through a process of conscious motivation. For the self-system to come to terms with the environment the individual either accepts things as they are and makes the appropriate adjustments or gains mastery over them. If the discrepancy between the goals of the self-system are too wide then goals must be lowered in order to permit actualisation at that level. Yet again, this formulation has affinities with James's self-esteem equation (1890).

Angyal

Angyal (1941) postulated two patterns of self, one healthy, the other neurotic in accordance with two basic trends; self-determination and self-surrender. These arise due to the tensions between the environment pulling one way and the individual the other. The symbolic self is the aggregate of all the self-perceptions a person has. However, the symbolic self is not a reliable indicator of what a person thinks about himself as it is not necessarily a true picture of reality.

Maslow

Maslow (1954) emphasised a master drive of self-actualisation in his theory of human motivation. He claimed that 'practically every human being and certainly in almost every newborn baby, there is an active will towards health, an impulse towards growth or towards the actualisation of human potentialities' (p.168). Maslow proposed five basic needs in the following hierarchical order:

1. physiological needs, i.e. hunger and thirst
2. safety needs
3. love and belonging needs
4. esteem needs
5. self-actualisation needs, i.e. the desire for self fulfilment, for becoming what one has the potential to become
Maslow imagined that humanity is innately good and it is the environment that is the source of neurotic behaviour, misery and ignorance. Only when the first four needs are satisfied can the individual aim for self-actualisation.

Epstein

Epstein (1973) viewed the self-concept as a self-theory, maintaining that it was a 'theory that the individual has unwittingly constructed about himself as an experiencing functioning individual and it is part of a broader theory which he holds with respect to his entire range of experience' (1973, p.407).

In this formulation there was no need to get rid of the executive function of self to philosophy as James and Allport maintained. The function of Epstein's self-theory is threefold: to optimise the pleasure/pain balance, to facilitate the maintenance of self-esteem and to organise the data of experience that can be coped with effectively.

Epstein advocates a position similar to that of Kelly's Personal Construct Theory in that the individual is trying to solve the problems of everyday living by behaving as a scientist, continually making and testing hypotheses and revising their concepts accordingly. A subsequent emergence of three sequential subsystems, of bodily self, inferred inner self and moral self is postulated. These conditions that prevent an individual developing an inferred inner self are an absence of a feeling of control, being unable to assimilate the data of experience or maintain a pleasure/pain balance. For example, Epstein asks us to

'consider the case of a child who is unconsciously if not consciously hated and who, if he were to internalise the values of significant others, would hate himself.

Consider, further, that the only attention that he could hope to obtain would be when he failed in something. We are considering a situation of a self-system, were for it to develop, would have to be turned against the welfare of the individual, contributing to low self-esteem and to an unfavourable pleasure/pain balance. It is hypothesised
that under such circumstances, if extreme enough, a self-concept would not develop at all, while under less extreme circumstances, the development of a restricted or distorted self-system would occur' (p. 414).

If indeed Epstein is correct, and under certain conditions it may be advantageous for a full self not to develop and interact with a hostile environment, then this has obvious implications in our ability to correctly analyse the self-esteem of those most vulnerable. This of course has implications for assessing the self-esteem in emotionally and behaviourally disturbed populations and particularly so for the current investigation.

Harre

Harre (1998) believes that the singularity that we each feel ourselves to be is not an entity. Rather it is a site, a site from which a person perceives the world and a place from which to act, indeed 'selves' are grammatical fictions. There are only persons. Harre introduces what he terms his 'standard model' that encompasses the four main concepts of personal identity that are the ordering principals of the actual fields of usage of words by which the sense of personal identity and singularity is routinely expressed. His ontology of selfhood is;

Person: the embodied, publicly identifiable and 'individualable' and 'unanalysable' being around which the human form of life revolves.

Self 1: the concept of self that is embedded in a person's sense of self, of occupying one and only one standpoint from which to perceive and act upon the environment.

Self 2: the totality of attributes of a person including that person's beliefs about him or her. The concept is manifested in the self-concept which is none other than the stories one tells about oneself and the actions one performs as oneself.

Self 3: the sort of person we are taken to be by others. This is complicated by the fact that there is the self I intend to project and the self that others read in my speech and action.
According to some theorists the 'self' is an illusion (Blackmore, 1999). According to this thinking we are nothing more than a collection of genes and 'memes' in a unique environment.

Memes are ideas, skills, habits, stories, songs or inventions that are passed from person to person by imitation. In other words they are rather like a virus, and we are compelled to pass on the information to others, who do the same in turn. Unfortunately memes, unlike genes, have no material existence and are as hard to pin down as notions of the soul or spirit. In its most extreme form, this view is that there is no 'self' or 'I' at the core of our psychological being, just a collection of replicating mind viruses and genetic predispositions that conspire to create the twin illusions of free will and mental coherence.

2.7. THE THEORETICAL IMPORTANCE OF THE SELF-CONCEPT

Educators are interested in the relationship between self-concept and students' motivation to learn, and the influence that these have on school achievement (Hay, Ashman & Van Kraayenoord, 1998). Marsh, Chessor, Craven and Roche (1995) note that developing and maintaining a positive self-concept is typically emphasised as one of the most important goals in education, as well as a mediating variable that facilitates the attainment of other desired outcomes.

Even though 'self-concept' is only of twentieth-century origin (Burns 1986), over the years various authors have attempted to give definitive definitions of self-concept but none are universally accepted. Lawrence, (1988) for example, defines it as: 'the sum total of an individual's mental and physical characteristics and his/her evaluation of them' (p.2).
Burns (1986) defines self-concept as 'a composite image of what we are, what we think we can achieve, what we think others think of us and what we would like to be' (p.1).

For Pope et al., (1988) self-concept is 'the constellation of things a person uses to describe himself' (p.2).

Gresham et al., (1998) invokes James when he defines self-concept as 'a complex, interactive network of self-perceptions a person holds about his or her confidence in enacting certain behaviours and in having certain culturally valued personal attributes. Elements of a person's self-concept are influenced by and interact with, other psychological constructs such as outcome expectations and subjective task value' (p.21).

Early factor analytical studies of self-concept failed to identify domain-specific factors (Coopersmith, 1967). Coopersmith & Feldman (1974) stated that 'the self-concept consists of the beliefs, hypotheses and assumptions that the individual has about himself'. They attempted to establish the divergent validity of domain specific measures but his constructs were unsuccessful. Today self-esteem is generally recognised to be multidimensional.

The major theoretical basis for the current research is the Shavelson model that maintains self-concept is a multidimensional. General self-concept is at the apex and then divided into academic and non-academic self-concepts at the next subsidiary level. Academic self-concept is subdivided into particular subject areas such as mathematics and English. Non-academic self-concept is also divided into the subject areas of social, emotional and physical self-concepts. Social self-concept can be divided into the sub-areas of peer and parent, as they relate to self-concept. Physical self-concept can be divided into sub-areas of physical abilities and physical appearance. Shavelson's model has the self-concept as an organised, hierarchical, multifaceted structure.
Shavelson, Hubner & Stanton (1976) emphasised the multidimensionality of the self-concept and stated that ‘the self-concept is multifaceted; the particular facets reflect the category system adopted by a particular individual and/or shared by groups....the category system appears to include such areas as the school, social acceptance, physical attractiveness and ability’. They argued that the relationship between self-concept and other constructs cannot be understood if this multidimensionality is ignored. Further, an individual is capable of perceiving himself differently in terms of relative separate facets and may have, for instance, a very high self-concept of physical ability but at the same time a very low self-concept of academic ability. Therefore the relationship between academic achievement and self-concept could vary depending on the dimension of self-concept measured. Similarly, the relationship between self-concept and social skills or behaviour also may vary depending on the dimension of self-concept considered. (There are obvious parallels here with the work of William James.)

Shavelson, Hubner & Stanton (1976) compiled and distinguished seventeen definitions of self-concept that have been found in the research literature which share common features: (a) organised, (b) hierarchical, (c) stable, (d) evaluative, (e) differentiable, and (f) multifaceted.

However, the extent to which these six features are exhibited by students with special needs has not been established. Moreover, self-concept may be differentiated as children mature and there is relatively little data to inform us of the extent to which children with various special needs are differentiated by self-concept. Self-concept may be correlated with different variables at different ages or grades (e.g. with social behaviour when in primary school and physical competence and attractiveness when in secondary school). Also we do not know, for example, if self-concept fluctuates for children with emotional and behavioural difficulties, but is stable for children with
learning difficulties, as little systematic research has been done in self-concept of children with emotional and behavioural difficulties (Gresham & MacMillan, 1997).

Most early studies have found support for the multidimensionality of this multifaceted structure (Harter, 1982; Shavelson & Bolus, 1982) with later studies confirming that self-esteem comprises a number of facets or components such as General, Social, Academic and Parent Related. Findings suggest that self-concept in a particular academic area is strongly influenced by the achievement grade in the same area (Battle, 1992; Harter, Whitesell & Junkin, 1998; Vispoel, 1995).

In the past theorists have disputed whether self-esteem is 'global' or 'domain-specific'. The affective component takes as its focus either the person as a whole (self-esteem) or various particular domains such as cognitive, physical or social competence, or even specific subdomains, such as mathematical or English ability.

Global or general self-esteem is seen therefore as the apex of a hierarchy that is divided into academic and non-academic self-concepts. The research based on Shavelson and Bolus's 1982 model assumes that, for example, academic achievement will be more positively corrected with academic self-esteem and that other matching content areas such as social achievement, will also be more closely correlated with social self-esteem than with self-concept in other facets of achievement. They argued that 'self-concept is influenced by specific experiences. Therefore, the more closely self-concept is linked with specific situations, the closer is the relationship between self-concept and behaviour in the situation' (p.415).

Harter (1982) also examined the issue of multidimensionality of the self-concept in a review of self-concept and research. She argued for the need to consider both domain specific components and a general, subordinate component of self. In 1988 Harter focused on an evaluation of self in which individuals are required to make judgements about their competence or adequacy across a variety of content areas. Her work was a
two-pronged affair, examining both the empirical and theoretical aspects of self-concept. She conceptualised the self-concept as a collection of domain-specific judgements about competence or adequacy and a goal.

Her results, based on factor analysis, showed that children of eight years and over distinguish five separate domains: scholastic competence, athletic competence, social acceptance, physical appearance and conduct. In contrast, younger children distinguish fewer domains; for example, they define cognitive and athletic skills as one factor.

Shavelson & Bolus (1982) suggested a hierarchical model of self-concept which has become prominent in education. Below the highest level of general self-concept there are three content areas of self-concept: academic (cognitive), social, and physical, which are then further broken down into various subareas. The academic self-concept, for example, comprises of the self-concepts of reading, mathematics and other subjects; and social self-concept is differentiated into relationships with peers and parents.

For Lawrence (1988) underpinning the theoretical notion of self-concept is the notion that the development of self-concept is a product of a child's interpretation of life experiences that determines self-esteem levels. This is termed the phenomenological approach (Rogers, 1951). The phenomenological approach postulates that it is not events themselves that determine emotions, but the person's interpretation of those events.

However most theorists, according to Lawrence (1988), would agree self-concept has three aspects: the cognitive (thinking): the effective (feeling) and the behavioural (action).

In an attempt to discriminate between confusing terminology theorists have differentiate the umbrella term of self-concept into;

- self-concept: an individual's awareness of his own identity
- self-image: the individuals awareness of his/her mental and physical characteristics
• ideal self: an image of the person he would like to be
• self-esteem: the evaluation of the discrepancy between self-image and ideal self; an effective process and a measure of the extent to which the individual cares about this discrepancy

This leads Lawrence to describe self-concept as an umbrella concept because subsumed beneath the 'self' there are three aspects: self-image (what the person is); ideal self (what the person would like to be); and self-esteem (what the person feels about the discrepancy between what he/she would like to be).

Self-concept is, therefore, an organisation of self-attitudes. It is multifaceted, and refers to a perception of oneself that develops over time through various interactive experiences with the environment. Self-concept also contains an evaluative component as it is affected by the perceptions of others and through internalising attributes for one's own behaviour (Shavelson and Bolus, 1982).

In summary, the self-concept is a hypothetical construct but is nevertheless recognised as one of the most important components of an individual's personality. It plays a key role as an integrative aspect of personality in motivating behaviour and securing general well-being. It is based upon a combination of objective information about oneself and subjective evaluation of that information. (Pope et al., 1988). In fact, some researchers (Burns, 1986) firmly believe it is the *sine qua non* in the explanation of human behaviour.
2.8. THE DIRECTION OF CAUSALITY BETWEEN ACHIEVEMENT AND SELF-CONCEPT

The direction of causality between academic achievement and academic self-concept has been the subject of considerable disagreement and debate. In the clinical area, self-concept has played an important role on a number of systems of psychopathology such as that of Cooley (1956) and Mead (1934) where characteristically of the medical model, attitude change (self-concept) is a prerequisite of subsequent behaviour change. Therapeutic intervention with clients diagnosed as low in self-concept traditionally centred around verbal interactions designed to promote an attitude change in self-concept, hopefully followed by a behavioural change.

A behavioural approach to changing self-concept takes the opposite approach and assumes that an attitude change will follow a behavioural change, usually through reinforcement procedures. Individuals with low self-esteem characteristically emit a low frequency of positive self-statements (Hauserman, Miller & Bond, 1976). If one defines self-concept as the sum of sentences a person says to himself and others about himself, then self-esteem may be strengthened, according to Skinner (1957), by simply increasing that class of verbal operants. Hauserman, Miller & Bond, (1976) reported mixed evidence for this 'chicken and egg situation'. Early studies (Bornstein & Siprelle, 1973) for example, in support of the behaviour first, attitude change later, used behavioural procedures to produce substantial and long-lasting weight loss in an obese woman. Similarly, Scholander (1972), in using a punishment procedure to eliminate compulsive neck-gripping behaviour, reported an increase in self-esteem. Cooper & Shea (1998), in discussing the evidence for the notion that children with ADHD often experience overtly directing and antagonistic approaches to discipline from their parents and teachers,
maintain that the psychological effect of these experiences are likely to include lowered self-esteem.

In support of attitude first, behaviour change later, are studies on depressed children. They also have low levels of self-esteem and low perceived academic and social competence (Asarnow, Carlson & Gutherie, 1987) and display a variety of cognitive errors, including overgeneralising their predictions of negative outcomes, catastrophising the consequences of negative events, selectively attending to negative features of an event and incorrectly taking personal responsibility for negative outcomes. Changing their attitude can change their behaviour (Kendall, Stark & Adam, 1990).

Other early research (Finn Stott & Zarichny, 1988) attempts to explain the high percentage of juveniles sent to court. As the child becomes increasingly frustrated by school failure, he becomes more disruptive with age, with more attention paid to behaviour and less to academic failings. As the cycle perpetuates itself the child falls further behind and becomes more of a problem. Self-esteem is viewed as a central mediating variable, with consistent failure threatening self-esteem. This results in a search for less socially sanctioned activities through which they can experience success. They found, when reviewing the educational histories of youngsters who appeared in juvenile courts, 50-75% had general/specific learning difficulties and were caught in a cycle in which early (learning) problems went undetected by school personnel, creating circumstances that ultimately caused referral to the court system. Finn Stott & Zarichny, (1988) maintained that in order to increase their self-esteem levels, greater participation in school was necessary. Interestingly, however, no data on actual self-esteem scores can be found in their paper to substantiate their claim for the postulated cycle of school problems/delinquency and low self-esteem.

Daniels et al. (1999) noted the problems with curricular provision speculating that failure to cater for learning difficulties may be a significant cause of disruptive
behaviour and postulated that the National Curriculum had caused an increase in inappropriate and disruptive behaviour: producing rather than reducing the number of children with emotional and behavioural difficulties. Place et al., (1999) maintained that the complex mix of psychiatric problems of children with ADHD is very potent in lowering their self-esteem and can easily cause them to give up on academic strivings.

Martin & Hayes (1998) maintain that it is recognised that many children with emotional and behavioural difficulties have low self-esteem, and that the relationship between learning difficulties and emotional and behavioural problems could be the result of a third factor i.e. self-esteem. They quote McNamara & Morton (1995):

'The first approach to children with emotional and behavioural difficulties who have learning difficulties should be to address their feelings about themselves. The raising of their self-esteem through counselling approaches is a prerequisite to any changes in behaviour and should precede any attempt to gain successful feedback through progress in their learning.' (p.14).

However, a study was carried out on boys of 12.7 to 15.5 years with a broad social background by Marsh & Young (1997) examining the causal effects of academic self concept on academic achievement, using structural equation models, found that reciprocal effects existed between self-concept and achievement:

- Maths self-concept led to an increase in maths achievement that led to increased maths self-concept.
- Science self-concept led to an increase in science achievement that led to increased science self-concept.
- English self-concept led to an increase in English achievement that led to increased English self-concept.
2.9. THE EVIDENCE FOR CHILDREN WITH EMOTIONAL AND BEHAVIOURAL DIFFICULTIES HAVING LOW SELF-CONCEPT

The evidence for self-esteem differences for children with emotional and behavioural difficulties and those with other special needs and those without either is disputed. For example, Gresham & MacMillan, (1997) found in their study, that contrary to much theorising in the literature, even average levels of academic self-esteem did not differ when they examined 231, third graders showing a comorbid behaviour pattern of hyperactivity-impulsivity-inattention and conduct problems, with children having internalising and externalising problems and matched controls. Furthermore, the groups did not differ from controls on measures of social self-esteem, academic self-esteem and general self-esteem.

Lund (1987) found that children with emotional and behavioural difficulties have self-esteem scores, using the LAWSEQ, significantly lower than those of children in a normal school, adding "this is the first time a direct link has been found between emotional and behavioural difficulties and self-esteem (p.30). Lund (1989) also found that children attending day schools for children with emotional and behavioural difficulties increased their self-esteem over a period of two years, as measured by the LAWSEQ. However no statistical significance was obtained for these results. He was unable to explain these findings, but suggested that positive behaviour management techniques, the smaller size of the schools and a more accepting ethos could all play a part.

Rickmans, Brown and Clark (1984) examined the relationship between self-esteem and maladaptive behaviours in older students and found that self-esteem was inversely proportional to various indices of maladaptive behaviour such as alienation and non-conformity. Self-esteem also varied as a function of gender and social class.
Finn, Scott and Zariachny (1988) reviewed the educational histories of youngsters who appeared in juvenile court and suggested that the low self-esteem of juveniles may be connected to anti-social and delinquent behaviour.

It is only possible to state that, in general, investigations of self-concept/self-esteem studies comparing students with and without special needs have yielded inconsistent and equivocal results, with a similar picture found in the research on the self-concept/self-esteem of behaviourally disturbed youth. Nevertheless, it is generally recognised that some children with emotional and behavioural difficulties experience particular difficulties with self-concept, whereas some do not.

Interestingly, as can be seen in more detail in the appendices, the results from the current study using BCFSEI-2, show that the mean self-esteem scores for the whole 'middle school' group were exactly on the border between 'low' and 'intermediate'. For the two classes used in the main study, the experimental group means showed class 5 had low self-esteem whereas the comparison group means showed class 4 had intermediate self-esteem scores.

Earlier studies suggested increased self-concept increases academic ability. Shavelson and Bolus (1982) suggested a tentative causal predominance of self-concept over achievement, using cross-lagged panel models employing a path analysis technique they found a causal effect of academic self-concept on school performance.

Other research seems to suggest that one's level of ability is a determinate of self-concept. Caslyn & Kenny (1977) found, in a longitudinal study, that academic achievement determines the level of one's self-esteem, but Bachman & O'Malley (1986) found in their research with high school students, that self-esteem had no causal significance on educational attainment, but that increased achievement positively impacted on self-esteem. However, Atherly (1990) and Chapman, Lambourne & Silva (1990) both found that academic performance is the main predictor of self-esteem. In a
two year longitudinal study Hoge, Smit & Hanson (1990) found that self-concept in a particular area is strongly influenced by the achievement in the same area, but general self-concept is unaffected by their average mark.

Still other researchers have stressed the difficulty in assessing the causal relationship between self-concept and academic achievement (Bryne, 1986).

However, there have been far fewer studies on the possible reciprocal relationship of self-esteem and interventions tackling such affective dimensions as domain specific social self-esteem etc. A recent study is a welcome exception. For example, as mentioned earlier, (Bishop, & lnderbitzen, 1995) have looked at the relationship between peer relations and self-esteem; specifically, how peer acceptance and friendship are related to self-esteem. The self-esteem scores of 542, ninth-graders in Nebraska USA showed no difference in self-esteem scores across sociometric groups. However, they found that subjects with at least one reciprocal friend had higher self-esteem scores than subjects without a friend. There did not, however, appear to be a cumulative effect of number of friendships on self-esteem scores.

Place et al. (1999), in their examination of ADHD as a factor in the origin of behavioural disturbance in placing children in a school for emotionally and behaviourally disturbed pupils, found 'as might be expected, their self-esteem and self-confidence tended to be low, although the evaluation (of depression and self-esteem) did not allow any causal link to be made between these two features' (p. 160).

The current study does not test the causality relationship between self-concept and behaviour. It does, however, assume that a behavioural change i.e. in social skills, cooperative behaviour and positive self-referent verbal statements are a prerequisite for an increase in self-esteem. It also assumes that the relationship between self-concept and behaviour is somewhat reciprocal. Furthermore, from a theoretical perspective, and generally supported by the available research evidence on each intervention's impact on
self-esteem, it is postulated that increased self-esteem would accrue over the duration of the three interventions.

2.10. AN OVERVIEW OF THE SELF-ESTEEM OF CHILDREN WITH EMOTIONAL AND BEHAVIOURAL DIFFICULTIES IN RELATION TO THE KEY RESEARCH QUESTIONS

The history of the classification of children with emotional and behavioural difficulties is muddled and occasionally contradictory, with an overlap and co-occurrence of children deemed to have emotional and behavioural difficulties, learning difficulties and ADHD, with some favouring classification, others not. The history of the concept of self, its theoretical importance and direction of causality is also often vague and contradictory. However, in reviewing the major theories of the self-concept it is apparent that although they all differ in detail, they nevertheless have many features and ideas in common. Perhaps most striking is that many of William James' ideas can still be seen to have influenced many theorists right up to the present day. James' self was hierarchical and contained different aspects (material, bodily, social and spiritual) that were integrated with one another and a pure ego. Today we still have global and domain specific areas of self-esteem, as most theorists recognise the self as multidimensional or multifaceted and divide it into categories.

Likewise, the evidence for children with emotional and behavioural difficulties having low self-esteem is also vague, muddled and contradictory.

It is therefore important to attempt to investigate and determine whether there exists a causal relationship between the three different types of intervention and the self-esteem and other affective variables of children with emotional and behavioural difficulties. Furthermore it is important that the two key research questions are investigated in order
to establish a research base for future interventions and programming, in order to help this population.
CHAPTER 3

REVIEW OF THE RELATED LITERATURE ON THE IMPACT OF
SOCIAL SKILLS TRAINING, COOPERATIVE LEARNING AND
COGNITIVE BEHAVIOURAL INTERVENTIONS ON SELF-
ESTEEM AND AFFECTIVE VARIABLES OF CHILDREN

3.0. OVERVIEW OF CHAPTER 3

Chapter three is divided into three main sections, social skills training, co-operative
learning and cognitive behavioural interventions. Each section discusses the literature
on these three interventions used in the current study that attempted to enhance the self-
esteem and other affective variables of children with emotional and behavioural
difficulties. The first section examines the rationale, definitions and history of social
skills. A discussion of theories of social competence and social skills are followed by the
research evidence for social skills interventions enhancing self-esteem in various groups
of children. The second section examines the rationale, definitions and history of co-
operative learning. A discussion of the theoretical evidence for the efficacy of co-
operative learning is followed by the research evidence for co-operative learning
interventions enhancing self-esteem in various groups of children. The third section
examines the rationale, definitions and history of cognitive behavioural interventions. A
discussion of the theoretical evidence for the efficacy of cognitive behavioural
interventions is followed by the research evidence for cognitive behavioural
interventions enhancing self-esteem in various groups of children.
3.1. SOCIAL SKILLS OVERVIEW

This section examines social skills, the first intervention in the study that attempted to enhance the children's self-esteem, and/or, other dependent variables. Initially, we examine the rationale for using a social skills intervention with children in general, and for children who have emotional and behavioural difficulties. Then the relationship between self-esteem and social skills is examined. Definitions of social skills, followed by the 'history' of social skills interventions (which the author maintains is closely tied in with exclusion of children with special needs) is then briefly documented. Theories of social skills as part of the broader concept of social competence are then presented. This is followed by a brief examination of the lack of underlying conceptual principles of motivational/affective variables in social skills training and how social skills deficits can be conceptualised under five different theories of motivation. The ensuing discussion concentrates on Bandura's (1982) self-efficacy theory as adapted by Gresham (1987). Self-esteem as a correlate of peer acceptance is then discussed, followed by a brief account of social cognitive training. Whether the sociometric status of students with special needs can be improved through social skills training is then examined. We then examine the research evidence for the efficacy of social skills programmes enhancing self-esteem. This is followed by the research evidence on the efficacy of social skills programmes enhancing self-esteem for children with special needs, and then the research evidence on the efficacy of social skills programmes enhancing self-esteem for children with emotional and behavioural difficulties.
3.2. RATIONALE FOR THE SOCIAL SKILLS INTERVENTION

The ability to successfully interact with one's peers and significant others is one of the most important aspects of adult life and therefore a child's development (Gresham, 1987). As several theorists have argued, peer relationships play a unique role in human development (Hartup, 1983; Sullivan, 1953). Healthy peer relationships promote the development of moral reasoning, co-operation and reciprocity (Hartup, 1983; Bolger, Patterson & Kupersmidt, 1998).

Hartup maintained that 'Peer relationships are not luxuries in human development but necessities' (Hartup 1979a, p. 252) and later 'identification and remediation of social skill deficiencies as well as enhancing the acceptance of students by peers and teachers are seen as critical aspects of an 'appropriate education' (Hartup, 1979a). Gresham (1987) also emphasised in his comprehensive paper that the identification and remediation of social skills problems was a critical aspect of an 'appropriate' education which carries important diagnostic and intervention implications.

Various researchers have documented the problems some children have with social skills stating that they are important for a number of reasons (Gresham & MacMillan, 1997; Gresham et al., 1998; Royer, Desbiens. Bitaudeau, Maltais & Gagnon, 1999). Children who are deficient in social skills and/or encounter problems with their peer relationships are likely to experience a school climate less conducive to learning and school achievement. They also experience problems in the academic and social/affective areas (Bolger, Patterson & Kupersmidt, 1998; Guay, Boivin & Hodges, 1999; Sletta, Valas, Skaalvik & Sobstad, 1996).

According to Royer et al., (1999) most researchers and practitioners now consider social skills training as an essential component of any intervention programme offered to children with emotional and behavioural difficulties.
Children who display social skills deficits also experience a multitude of academic, affective and behavioural problems. For example, researchers have found links between social skills deficits and self-esteem (Aherns, Barrett & Holtzman, 1997; Berry, 1996; Bishop & Inderbitzen, 1995; Gresham & MacMillan, 1997; Gresham et al., 1998; Haugen & Lund, 1999; Martin & Debus, 1998; Place et al. 1999; Poirier, 1991; Verduyn, Lord & Forrest, 1990), social skills deficits and socially anxious children (Ginsberg, LaGreca & Silverman, 1998), social skills deficits and co-morbidity with social, academic and affective risk factors (Gresham et al., 1998; Margalit, 1995), social skills deficits and learning difficulties, (Smith & Nagle, 1995), social skills deficits in ‘high anger’ children (Deffenbacher Lynch, Oetting & Kemper, 1996), social skills deficits and externalising behaviours with ‘boys without friends’ (Frankel & Myatt, 1996), social skills deficits of 16-24 year old prisoners (Valliant et al., 1995), social skills and ADHD (Grizenko et al., 1993; Pfiiffer & McBurnett, 1997; Twoey, 1997; Wright, 1996) and social skills and behaviour difficulties (Gresham & MacMillan, 1997; Walker, Colvin & Ramsey, 1995).

Problems with social skills also predict an adverse array of long-term outcomes such as conduct disturbance, substance use disorders, school failure, school dropout and delinquency offences (Greene, Biederman, Faraone, Sienna & Garcia-Jetton, 1997; Parker & Asher 1987). Reviews of self-esteem that include social skills deficits have been carried out by Haney & Durlak, (1998) and an overview of social skills, concentrating especially on the effects of friendships in schools on self-esteem by Roffey, Majors & Tarrant, (1997).

According to Roffey et al., (1997) children in school are in a system that is as much social as academic, and schools which plan and take account of this to promote acceptance and inclusion will also be optimising achievement. Proactive social intervention, at whole school, class and at individual levels addresses many issues
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including self-esteem, behaviour, emotional support and collaborative skills through research on children's friendships and general social skills.

Although conflicting evidence in the literature for general levels of self-esteem for various groups of students with special needs as compared to their normal counterparts has been found by Gresham & MacMillan (1997), children with special needs and those with emotional and behavioural difficulties in particular, have been found to exhibit a worrying plethora of other difficulties. In a recent review of the empirical research examining the social competence and affective functioning of children with special needs or 'mild disabilities' they found these children had, for example, difficulties in negotiating both peer-related and teacher-related adjustments in school settings, to have poorer social skills, to exhibit more interfering problem behaviours, and were poorly accepted or rejected by peers. Gresham & MacMillan, (1997) classify mildly handicapped children as having specific learning difficulties, mild mental retardation, attention deficit-hyperactive disorder and crucially, for the purposes of the current study, those children with behaviour disorders. However, before these characteristics can be understood more fully it is necessary to have better methodological safeguards that include better sample designs, heterogeneity of samples, demographic variables, nosological error and the paucity of longitudinal research (Gresham & MacMillan, 1997).

Findings by many researchers show that children with behaviour disorder problems typically exhibit situationally inappropriate behaviours or feelings under normal circumstances that adversely affect academic performance (Gresham et al., 1998). Of particular concern, are that these behaviour disorder problems also typically adversely impact on other aspects of the lives of children with emotional and behavioural difficulties in a negative fashion (Royer et al., 1999). It is hoped that by attempting to
improve the children's social skills, this will vicariously positively impact on their self-esteem and their lives in general.

Another worrying finding is that many studies indicate that children with emotional and behavioural difficulties do not want, have not developed or do not know how and when to use social skills necessary to be accepted in school. The problem encountered by most children is not a matter of knowing how to perform the skill, but rather, of where and when to perform it (Gresham, 1984).

Further reasons why theorists, researchers and practitioners believe it is important to remediate social skills deficits is that demonstrating an inability to conform to teachers' and peer expectations as to what is considered acceptable and appropriate behaviour, leads to referral and consideration for special education. When starting school students have to negotiate two kinds of adjustment in social behaviour: teacher-related and peer-related. Peer-related adjustment reflects children's abilities to establish and maintain satisfactory interpersonal relationships that result in peer acceptance and the formation of friendships (Walker, Colvin & Ramsey, 1995). In addition to academic expectations, teachers hold certain standards of expectation and tolerance levels for children's social behaviour in the classroom. Most students who are referred are done so on the basis of what is termed the model behavioural profile, an extremely useful model of interpersonal social behavioural competence for school settings, which describes both adaptive and maladaptive teacher and peer social-behavioural domains and outcomes. The maladaptive domain is characteristic of behaviours that disrupt the classroom ecology and result in teacher rejection, school failure and referral to special education. The social behaviours in the peer-related domain are substantially different from those in the teacher-related domain but share many similarities (Gresham & MacMillan, 1997).

There is a substantial body of literature suggesting that a large majority of children with special needs, or those described as children with 'mild disability', exhibit deficient
social skills and excesses in interfering problem behaviour. This holds true for students with learning disabilities, mild mental retardation, attention deficit disorders, children who are low in academic achievement as well as children with emotional and behavioural difficulties (Gresham & MacMillan, 1997).

A comprehensive investigation by Merrell, Johnson, Merz & Ring, (1992), using teacher-rated social skills, found that overall, students with learning disabilities, mild mental retardation and children who are low in academic achievement scored approximately 1.2 standard deviations below their normal counterparts, suggesting that these groups’ social skills functioning is exceeded by approximately 88% of the normal group. Significantly, there was an even greater discrepancy between the emotionally and behaviourally disturbed groups. They differed in social skills by 1.81 standard deviations from the normal group, and 0.58 standard deviations from the other ‘mildly disabled’ groups. From these results Merrell et al., (1992) concluded that social skills is a weak variable in discriminating between students with learning disabilities, mild mental retardation and children who are low in academic achievement, but is a strong predictor of membership in the behaviourally disturbed group. Similar findings were reported by Gresham, MacMillan and Bocian (1996).

Other research has demonstrated that children with behavioural problems can be substantially differentiated as a group by social skills deficits (Walker et al., 1995). In fact, difficulties in establishing and maintaining satisfactory interpersonal relationships with peers and teachers is the central, defining characteristic of children with behavioural difficulties (Kauffman, 1993). According to Gresham & MacMillan (1997) those children with behavioural difficulties are the most deficient in social skills.

However, there is a dearth of evidence of the relationship between children with emotional and behavioural difficulties and social skills interventions on their (presumed low levels of) self-esteem. This relationship is much more tenuous than is generally
assumed/portrayed in the literature as little actual research has been carried out in relation to these variables.

3.3. DEFINITIONS OF SOCIAL SKILLS

Over the years various researchers have commented on the difficulties associated with obtaining an objective definition of what constitutes social skills. Investigators into social skill repertoires need to take into account not only the deviant aspects of social behaviour, for example, but also building positive behaviours as well as eliminating negative ones (Hops & Greenwood, 1988). A number of reviewers and researchers (Gresham & MacMillan, 1997; McFall, 1982) have offered definitions of social skills (as part of the broader definition of social competence). Briefly, the two terms can be more useful in distinguishing between specific social behaviours and the impact of these behaviours on people in the environment. Definitions of social skills range from the narrow and specific to the very broad and general. In an early definition, for example, Libet & Lewinsohn (1973) defined social skill as ‘the complex ability to both emit behaviours that are positive or negatively reinforced, and not to emit behaviours that are punished or extinguished by others’ (p.304). Another frequently quoted definition of social skills is that of Combs & Slaby (1977) ‘the ability to interact with others in a given social context in specific ways that are socially acceptable or valued and at the same time personally beneficial, mutually beneficial, or beneficial primarily to others (p.62).

In general, social skills are seen as socially acceptable learned behaviours that enable the person to interact with others in ways that elicit positive responses and assist in avoiding negative responses from them (Cartledge & Milburn, 1978). These skills are
the basic building blocks of social competence. Nevertheless, the major salient feature of social skills is consistently identified as verbal and non-verbal interaction.

McFall (1982) defined social skills in his two tier model of social competence and social skills as ‘the specific abilities that enable a person to perform competently at particular social tasks’ (p.23). Social competence is a summary term that reflects social judgements about the general quality of an individual’s performance in a given social situation. Social skill refers to one of a number of specific observable social behaviours that form the basis for judgements of social competence. The assumption is that interpersonal difficulties may arise as a function of deficits in social skill repertoires (Mcfall, 1982).

Gresham (1987) maintained that at least three general definitions of social skills could be found in the literature:

• A peer acceptance definition that for example uses psychometrics as indices of peer acceptance or popularity to define social skill. Thus children who are accepted or popular with their peers can be considered socially skilled. Although relatively objective, this definition nevertheless cannot identify what specific behaviours lead to peer acceptance or popularity. As such we are left with an identified group of children but have no knowledge as to why they are accepted or rejected.

• A behavioural definition of social skills attempts to ameliorate this problem by defining social skills as those situation-specific responses that maximise the probability of maintaining reinforcement and/or decrease the probability of punishment contingent upon one's social behaviour. Observations of behaviour in naturalistic or role-playing situations are used to define social skills (Greenwood et al., 1979). Concerns are expressed by some researchers that merely increasing the frequency of certain behaviours that are a priori defined as 'social skills' may not be functionally useful in the students' interactions with the wider society (Gresham, 1984).
• A 'social validity' (Gresham, 1987) definition maintains that social skills are those behaviours which within given situations predict important social outcomes for students and youth. In school settings, important social outcomes might include (a) peer acceptance, (b) significant others' positive judgements of social competence, (teacher, parent's) (c) academic achievement, (d) adequate self-concept, (e) positive attitudes toward school, and (f) freedom from loneliness. This definition has the advantage of specifying behaviours in which children and youth may be deficient and relating these deficiencies to socially important outcomes in school settings.

Gresham's (1988) social validity definition has received empirical support from, for example, Green, Forehand, Beck & Vosk (1980). They used naturalistic observations of behaviour, sociometric indices and rating by significant others to assess and define social skills. An obvious advantage of this approach is that behaviours that are functionally useful can be specified, assessed, taught, and of course modified. Those behaviours in which the student demonstrates deficits on one or more indices can be addressed enabling more thorough and comprehensive analysis and intervention.

Gresham's (1988) social validity definition of social skills, above, is used in this study. By adopting the social validity definition for use in the current study within the school setting, the important social outcomes of (a) adequate self-concept, (b) significant others' positive judgements of social competence (teachers, care staff), (c) peer acceptance, (d) positive attitudes toward school, and (e) behaviour in naturalistic settings could be monitored. This definition has the advantage of specifying behaviours in which children may be deficient and relating these deficiencies to socially important outcomes in the school settings, and the wider social world in general.

However, the issue here is not so much whether the various definitions should be seen as competing with one another, but how each one adds to our knowledge and understanding of social skills.
3.4. THE HISTORY OF SOCIAL SKILLS TRAINING

The history of social skills interventions with children is intimately tied up with what Gresham & MacMillan (1997) termed the 'preferred service delivery model', that is, mainstreaming versus special school or class placement. 'Slow learners' in the early part of the twentieth century experienced persistent failure in mainstream settings. According to Gresham & MacMillan (1997), official school publications maintained that 'the first concern of a development teacher is to help the child gain confidence in himself and his own ability to do something well' ("Development Schools and Classes," 1926, p.14) and 'the desirability of making it possible for children with special needs to experience success in special classes as opposed to failure in mainstream classes'. The academic and social failures of these children were believed to adversely affect how they felt about themselves and their attitudes to school and learning and how other children in the school reacted to them. Early efforts concentrated on removing them from mainstream settings where they experienced academic and social failure and place them in more protective environments so they could experience success.

Children's social behaviour was the focus of considerable research attention in the 1920s and 1930s examining popularity, assertiveness, play and aggressive behaviour. In the 1950s and 1960s the success of mainstreaming versus special class placement depended upon academic achievement and social and personal adjustment, focusing in the 1960s on cognitive, rather than social development (Hops & Greenwood, 1988).

Various sociometric techniques such as self-concept scales, personality inventories, and various teacher and peer ratings were used to measure personal and social adjustment. Consistent findings at the time were that children with low IQs in mainstream were seldom selected as friends and were more commonly neglected or actively rejected. These findings led to professionals arguing for placement in special classes/schools.
Eventually sentiment turned against special schools/classes in the US, partly as a result of the possible negative impact of labelling and segregation on the social and personal adjustment of children with mild mental retardation. However, despite the emphasis on mainstreaming, the importance placed on personal and social development did not decline. Studies at the time demonstrated that socially incompetent children were more likely to drop out of school, become juvenile delinquents, underachieve academically and exhibit high levels of physical and verbal aggression (Gresham & MacMillan, 1997).

In the 1970s the notion that early remediation and the prevention of social skills deficits can significantly lower the risk of childhood and subsequent adult pathology became popular (Hops & Greenwood, 1988).

The evidence for improving the social interaction of learning disabled children through social skills training programmes comes from direct adult reinforcement of social interaction among peers, peer mediated interventions, group contingencies for promoting social interaction, social coaching, cognitive behaviour modification and interpersonal problem-solving. Most of the above procedures have involved middle, elementary-aged children and adolescents (Gresham, 1981a; Oden & Asher, 1977).

Older studies in particular found that, although students with learning difficulties do not appear to differ from their non-handicapped peers in terms of overall frequency of peer interactions, there does seem to be a difference in the quality of kinds of social interaction, with the former engaging in more negative and rejecting interactions (Bryan & Bryan, 1978).

One of the supposed benefits of mainstreaming was thought to be increased acceptance and a corresponding decrease in neglecting and rejecting classmates with special needs. Contrary to these predictions, Gottlieb’s (1981) review concluded that the more children without special needs came to know their counterparts with special needs, the less accepting of them they were. A review by Gresham (1981a) also demonstrated
that the supposed social benefits of increased peer acceptance, mutually beneficial positive social interactions and modelling of appropriate behaviour had little, if any empirical support. A more recent review (Gresham & MacMillan, 1997) also offered almost no support for the notion that placement in mainstream somehow guarantees or even facilitates the modelling of appropriate social behaviour by children with special needs. Other researchers have also sounded similar notes of caution (Hornby, 1999; Hornby, Atkinson & Howard, 1997). Hallenback & Kauffman (1995) maintained ‘If desirable models are both readily available and a pervasive influence on behaviour in neighbourhood schools and regular classes, then one might ask why these models do not prevent students from acquiring maladaptive patterns of behaviour’ (p.47).

The more recent inclusion movement (Ainscow, Farrell, Tweddle & Malki, 1999), has advocated inclusion on the anticipated benefits of peer acceptance, self-concept and social skills. Unfortunately, according to Gresham & MacMillan (1997) there is little solid empirical research supporting these presumed benefits of inclusion in social and affective domains for students with mild disabilities.

Whilst the ‘preferred service delivery model’ has changed repeatedly over the last century, there has been a persistent concern over the plight of children with difficulties in the domains of personal and social development. However, the apparent degree of concern over these outcomes has not been matched by efforts to develop and refine instruments and procedures for measuring these outcomes and perhaps more importantly, intervention techniques designed to facilitate positive social and affective outcomes have been largely ignored. In the early 1900s the concern was about the effects of failure and ridicule encountered by children with special needs in mainstream settings. By the end of the 1960s the concern was about labelling and segregating them from mainstream. However, it can be seen from the above brief overview that although the emphasis on mainstreaming has altered throughout the century this has not affected
the importance placed on personal and social development via social skills interventions, whether it be in mainstream, special classes or special schools.

3.5. THEORIES OF SOCIAL COMPETENCE AND SOCIAL SKILLS

Social skills paradigms, as conceptualised by learning and social learning theories are social skills are shaped by the environment which continually reinforces and refines these responses. Theoretical paradigms of social competence have developed along two principal lines: molecular approaches and process approaches. Molecular models have delineated a finite set of overt behavioural components, such as eye contact, tone of voice and body posture and gestures, which when performed adequately, are reinforced by the environment. Unfortunately, problems with treatment goals and maintenance have limited their utility. On the other hand, Process approaches, such as those presented by McFall, (1982) are an attempt to address treatment goals and maintenance by extending the treatment paradigm to include a series of both overt and covert steps that the individual will perform and are necessary for creating competent or skillful behaviours. The theoretical paradigm shifts from a purely skill-centred approach to the 'process' involved in creating skillful behaviour.

It is generally recognised that there are two different causes of poor social skills: skill deficits and performance deficits. Skill deficits are the result of a lack of acquisition of the appropriate target skills, whereas performance deficits which result from inappropriate use of skills already in the individual's repertoire. This can be due to insufficient previous reinforcement or the lack of appropriate self-regulatory mechanisms to ensure the skill's correct performance.
The distinction between not having the skill at all and having it but not using it has clear theoretical and applied implications. For the first instance to be correct it would mean that the target behaviour does not exist in the individual’s skill repertoire. However, this could be an erroneous assumption as the behaviour may in fact exist, but has never been actually observed by those monitoring the child’s social skills. Social Learning theory (Bandura, 1982), clearly supports the second instance that the behaviour is almost certainly present in the child’s repertoire. To comply with this assumption the child must have exhibited the behaviour or learned the behaviour in the past.

If appropriate social skills are absent from an individual’s skill repertoire then the treatment paradigm will involve the direct instruction of prosocial skills using either a molecular or process model. If on the other hand the child possesses the appropriate skills but does not use them then the appropriate treatment paradigm is a focus on activation strategies.

Informal discussions took place with the whole school staff as to the nature of the children’s social skills deficits. These, combined with general observations by the writer on a daily basis, led to a general view that whilst the distinction between whether the children’s social skills deficits were molecular or process, it was thought most likely that the problem was basically the latter. Therefore, it was thought prudent to employ a traditional training programme involving both molecular and process competencies comprising of the introduction of the target behaviour, direct practice, modelling, role play and reinforcement of target skills by focusing on behavioural monitoring procedures outlined in more detail in subsequent chapters. It was not assumed that the children had deficits according to just one of the two paradigms of social skills deficits. The aim of the intervention programme was to enable the children to be more socially skillful in that they would perform behaviours in a specific situation such that the potential for
receiving possible reinforcement from the environment is maximised (McFall, 1982) and thereby increase their self-esteem and other affective variables.

Although an exact definition of social competence is difficult to detail, (Hops & Greenwood, 1988), numerous models have been proposed. McFall’s (1982) conceptualisation of social competence distinguished between social competence and social skills. Social skills are the specific behaviours that a person uses to perform competently on social tasks. In contrast social competence is an evaluative term based on opinions and judgements of whether a person has performed social tasks adequately according to teachers, parents etc. McFall’s notion of social competence views social skills as specific behaviours which result in judgements of social competence. Thus, social skills are behaviours and social competence represents a judgement about those behaviours. This is similar to Gresham’s (1988) social validity definition of social skills (noted earlier and used in this study) which has the advantage of specifying behaviours in which children may be deficient and relating these deficiencies to socially important outcomes in school settings.

According to McFall (1982), when the concept of social skills is described in terms of a trait-like manner, it is treated as a hypothetical construct: it refers to a general underlying personality characteristic or response disposition. Thus social skills are not directly observable; on the contrary, a person’s observable behaviour is only a reflection of an individual’s social skilfulness. Typically, the person is said to ‘have’ or be ‘high’ in social skills, but there is little or no attempt to specify what particular skills the person ‘has’ or is ‘high’ in. Trait-like constructs amount to a circular or tautological use of the social skill concept. However, molecular models of social skills are construed in terms of very specific, observable units of behaviour, which are the building blocks of the individual’s overall performance in each interpersonal situation and are an attribute of a person’s situation-specific behaviour, not of the person per se. Molecular measures of
social skills have not generated any widely recognised or commonly used measures or much consensus on, for example, what behavioural units (eye contact, rate of talking, facial expression or speech content) should be coded and analysed in any particular situation. The attempts to avoid the ambiguities and problems of the trait approach by defining social skills operationally in terms of specific responses to specific situations have been plagued by ambiguities and problems of their own. According to McFall, a dogmatic belief in the inherent superiority of using the most molecular units possible is falling prey to the reductionistic fallacy. He maintains that both models are inadequate and offers an alternative two-tiered model that proposes social skills be differentiated from social competence.

McFall's (1982) reformulated conception of social skills integrates social skills and social competence with the identification of a socially competent task performance, a prerequisite step to a meaningful analysis of social skills. This two-tier approach subsumes all social competency problems within a skills framework and asks what combination of specific skills deficits needs to be rectified in this particular individual. However, McFall points out that a different skills-training programme would be required in each of the cases - which could cause problems in trying to deal with large groups or classes of children all of whom have different social skills deficits. Therefore, the current study utilises Gresham's (1988) social validity definition of social skills specifying the behaviours in which the children are deficient and relating these deficiencies to socially important outcomes in school settings.

3.5.1. THEORIES OF MOTIVATION IN SOCIAL SKILLS TRAINING

Wood (1982) distinguished between affective education, which stresses thoughts, feelings and interpersonal relationships and social skills training, which focuses on
teaching explicit behaviours to elicit positive responses from the environment. However, Gresham & Macmillan, (1997) stressed the transactional nature of these relationships.

Gresham (1987) and Gresham & MacMillan, (1997) has hypothesised that it may well be the case that certain motivational variables, for example, learned helplessness, affectance motivation, self-attribution etc., and affective variables (e.g., self-concept, self-esteem, locus of control, achievement motivation attributional style, school attitudes, loneliness etc.) interact with social skills training to produce differential effects on measures of social skills and sociometric status. If motivational and affective variables are viewed as dependent measures then certain social skills training techniques could differentially affect them. It is intended to examine this theoretical proposition in the current study.

3.5.2. SELF-EFFICACY, SELF-ESTEEM AND SOCIAL SKILLS DEFICITS CONCEPTUALISED UNDER FIVE DIFFERENT THEORIES OF MOTIVATION

Social skills deficits have been conceptualised under five different theories of motivation. These are:

Affectance motivation White, (1959) stresses the importance of an individual's perceived effectiveness in mastering his environment, and that a perceived lack of competence, self-esteem, anxiety in mastering situations and detriments in motivation can lead to a generalisation from one competence area to another. The student is typically caught in a vicious cycle of passivity, non-compliance, self-doubt and external reliance which is both counterproductive to academic achievement, interpersonal relationships and social acceptance.

Learned helplessness Seligman, (1975) postulates that individuals conceptualise that their behaviour and its outcome are independent. They learn through a series of failure-
based experiences that there is no relation between effort (behaviour) and changes in surroundings or the attainment of a goal (outcomes). Individuals do not initiate adaptive responses to remove themselves from adverse situations. They fail to learn, initiate responses and display emotional behaviours and have poor self-esteem, low motivation and depression. This in turn has a negative effect upon peer relationships, social interactions and social acceptance.

*Self-efficacy theory* Bandura, (1982), amended and reconceptualised the concepts of affectance motivation and learned helplessness into a theory of self-efficacy. He postulated that individuals' personal sense of self-efficacy regulates events in their lives coupled with judgements of how well they can execute behaviours required to deal with prospective situations. This affects behaviour by influencing individuals’ choice of activities, effort, expenditure and persistence in the face of difficulties, and once perceived efficacy is enhanced it tends to generalise. That is, repeated success in any setting and/or situation heightens self-efficacy and self-esteem, whereas repeated failure, particularly early on, lowers efficacy and self-esteem.

Efficacy and outcome expectations are differentiated as individuals may believe that behaviours will produce certain outcomes, but may not believe that they can perform the desired behaviours that will produce the necessary outcomes. They may avoid settings or situations that they believe exceed their coping skills. Self-efficacy theories do appear to have direct relevance for social skills training as perceived self-efficacy affects behaviour by influencing an individual’s choice of activities, effort expenditure and persistence in the face of difficulties. Self-perceptions of efficacy can predict behavioural choice and variations in coping behaviour and specific performance attainments.

*Applied behaviour analysis* Cook & Appoloni, (1976) maintain children experience difficulty in peer relationships because they either have not learned or they do not perform the behaviours that lead to satisfactory interpersonal relationships. Foster &
Ritchly's (1979) definition of social skills encapsulates the essence of an applied behaviour analysis explanation of social skills deficits: ‘Those responses, which within a given situation, prove effective, or in other words maximise the probability of producing, maintaining or enhancing positive effects for the interaction’ (p. 626).

Social skills are therefore situationally specific responses that maximise the probability of securing or maintaining reinforcement and decrease the probability of punishment or extinction contingent upon one's social behaviour and thereby enhancing affective variables such as self-esteem. Social skill problems are conceptualised into skill performance and self-control and seen as deficits in learning or performing the skill. Two hypotheses have been formulated in the literature to account for the social deficits of children with special needs and can be delineated into two basic types:

- Skills deficits where students do not know or do not have the necessary social skills in order to interact with peers appropriately.

- Performance deficits occur where students have the social skills but do not perform them at an acceptable level. Direct instruction using antecedent or consequent control techniques, although very useful in conceptualising and designing interventions, has been seen by some as overtly restrictive.

*Ecological-behavioural model* Wahler & Fox (1981) have suggested that a strict operant analysis of behaviour provides a limited understanding of behaviour in its ecological context and have suggested the fifth theory of motivation, that of an ecological-behavioural model in order to explain a student's social deficits. In this conceptualisation, a distinction is made between stimulus events and setting events in the analysis of behaviour. Setting events are made up of stimulus-response interactions and can occur separate in time and space from the subsequent stimulus-response relationships which they influence. The standards, expectations and tolerance levels that
teachers hold for children's social behaviour function as powerful setting events which influence subsequent stimulus-response interactions in the classroom.

These five different theories of motivation, like the different definitions of social skills in the previous section, should not so much be viewed as competing with one another, but as describing a similar phenomenon in slightly differing ways (Gresham, 1987).

3.5.3. SELF-ESTEEM AS A CORRELATE OF PEER ACCEPTANCE

According to Guay, Boivin & Hodges, (1999) peers may contribute to children's achievements as they are one of the most potent influences on their day-to-day behaviours in school. The quality of children's relationships with their classmates is associated with school achievement, and longitudinal evidence indicates that early peer rejection predicts decreases in academic performance. Self-esteem has also been established as a correlate of peer acceptance (Sletta, Valas, Skaalvik & Sobstad, 1996).

However, theory linking the relationship between quality of peer relationships and academic achievement is lacking. One possible theoretical explanation is peer relationships may impede or foster the development of important self-components (Guay, Boivin & Hodges, 1999).

Sletta, Valas, Skaalvik & Sobstad's (1996) empirical findings suggested that children who felt accepted had higher general self-worth. They presented a theoretical model that expanded the findings in recent studies suggesting that certain behavioural characteristics in children are closely associated with peer acceptance and that children who are not accepted by peers are more lonely than other children. They found that the children's self-perceptions were affected by their socio-emotional reactions to peer
difficulties and not directly by low peer acceptance. Also negative self-esteem had adverse consequences for children's goal orientation.

3.5.4 SOCIAL COGNITIVE TRAINING

Social cognitive training focuses on the underlying cognitive processes in social skills' acquisition. The aims of these programmes are increasingly to develop self-control and reduce negative impulses and behaviours by teaching a new and more effective problem solving style which reduces impulsivity and enhances problem solving skills. It can therefore be seen as a variant of social skills programmes.

Four questions are asked and answered by the individual; 'What is my problem?' followed by 'How can I solve it?' whilst generating multiple possible solutions. A solution is chosen, then implemented with the individual stopping in the middle to ask themselves 'Am I using the best plan?'. Finally they ask themselves 'How did I do?'. Individuals thereby learn to appraise themselves.

Although some social cognitive approaches have been shown to be effective in some studies, the empirical evidence is somewhat mixed. A meta-analysis by Schneider (1992) found that these approaches may not be as effective as social skills training programmes, although the different effectiveness may be due to differences in the measurement of change or in the populations being targeted.
3.6. RESEARCH EVIDENCE FOR THE EFFICACY OF SOCIAL SKILLS PROGRAMMES FOR STUDENTS

3.6.1. RESEARCH EVIDENCE FOR EFFICACY OF SOCIAL SKILLS PROGRAMMES FOR NORMAL STUDENTS

According to some earlier research, social skills training procedures based on direct instruction provide the best basis for promoting self-efficacy because they are based on direct performance accomplishments or mastery in the regular classroom. These instructional techniques include participant modelling, behavioural rehearsal, direct reinforcement-based techniques and peer initiation strategies (Cartledge & Milburn, 1978, Strain et al., 1984) with peer ratings, peer nominations, and peer assessment used to ascertain the sociometric status of students (Greenwood et al., 1979).

Still other studies, although unfortunately far fewer, have used behavioural assessments in the classroom or in 'naturalistic' environments. The current study has used both peer ratings of 'play with/work with' and behavioural assessments in a 'naturalistic' environment (the classroom) in order to obtain a comprehensive picture of the children's social skills.

Although social skills interventions do have a positive impact on social skills (Pfiffner & McBurnett, 1997; Lochman, 1992) a recent study by Royer et al., (1999) showed that the effectiveness of social skills training programmes was limited. They quoted a recent meta-analysis synthesis of 49 studies conducted between 1981 and 1990 by Beelmann, Pfingsten & Lobel (1994) which concluded that the long-term impact of social skills programmes is less important than their short-term effects and that generalisation and maintenance of changes are still a major problem. Another meta-analysis by Kavale & Forness, (1995) found problems with transferring new skills to the
classroom setting and outside of school. Schneider (1992) in a meta-analysis of 79
studies involving aggressive and socially withdrawn students found that social skills
training is only of moderate use in increasing social competence in natural settings.

McIntosh, Vaughn & Zaragoza, (1991) in a literature review, maintained that it is
practically impossible to conclusively demonstrate the efficacy of social skills training
programmes due to lack of control groups in most of the published studies.

Therefore, it is important to note that when reviewing studies containing
assessments of social skills, we are aware that some researchers maintain the
effectiveness of social skills training programmes are limited. Furthermore, a surprising
number of social skills training programmes have failed to select skills for training on
the basis of social validity, and have not taken a complete and comprehensive set of
measures in order to correctly assess their findings. These a priori assumptions of what
social skills deficits are, and whether children really do or do not display the requisite
skills 'on paper' as well as in 'naturalistic' settings is often difficult to ascertain from the
limited information available, instruments used and measures taken. Consequently these
oversights could significantly affect the outcomes of the research studies and
conclusions drawn.

3.6.2. RESEARCH EVIDENCE FOR EFFICACY OF SOCIAL SKILLS PROGRAMMES FOR
SPECIAL NEEDS STUDENTS

The areas of social and affective functioning, such as peer acceptance and rejection and
social skills problem behaviours (internalising/externalising), as well as self-concept,
have been consistently implicated in research as being problematic for students with
special needs and particularly problematic for those children with emotional and
behavioural problems (Gresham & Macmillan, 1997).
A number of studies in the special education literature, conducted primarily with elementary children, have demonstrated that students with special needs, especially those designated as having 'learning difficulties', are often poorly accepted or rejected by peers without special needs in general education classrooms (Gresham & Macmillan, 1997). Although there is conflicting evidence to be found in the research literature on the difference between special populations in terms of social skills, it is generally agreed that there are significant differences to be found (Cooper, 1996a). It is also generally agreed that it is possible to improve the social interaction of learning disabled children through social skills training programmes (Ginsberg, LaGreca & Silverman, 1998; Gresham, 1981a; Haney & Durlak, 1998; LaGreca & Mesibov, 1979; Lochman, 1992; Margerison, 1996; Odom, Jenkins, Spetz & Deklyen, 1982; Rohley, Majors & Tarrant, 1997) but they require programmes specifically designed to teach social skills for peer acceptance (as in the current study).

Some older studies (Bornstein, Beleck & Hersen, 1977) used instruction, feedback, behaviour rehearsal and modelling in a multiple baseline design to improve the social skills of a small group (4) of 'unassertive' children. They found considerable improvements in verbal and non-verbal behaviours of assertiveness. Unfortunately generalisation only involved role-play with adults in situations similar to those used in training, not assessment in a naturalistic setting.

Cook & Apollini (1976) also took a small group of 'handicapped' children and taught four positive social-emotive behaviours of smiling, sharing, positive physical contact and verbal complimenting using instructions, modelling and praise. Seven children in all were assigned to either treatment or control group whose average age was eight years six months. The treatment group showed improvements in the target behaviours of using instructions, modelling and praise in a within-subjects design using time sampling techniques. They found that all of the rates of the desired behaviours were increased
during the intervention and four subjects evidenced 'collateral' increases in the generalisation setting on at least one other behaviour when training in smiling was conducted. All three untrained subjects demonstrated increased rates of smiling and sharing when interventions were conducted to increase those behaviours with trained subjects. Both trained and untrained subjects generally maintained their increased rates of smiling, sharing and positive physical contacting across four weeks of follow-up observations.

Berler, Gross & Drabman (1982) selected three special needs children who were learning disabled and eight controls on the basis of peer sociometric ratings and teacher referral for social skills training. A multiple baseline treatment across target behaviours of eye contact and appropriate verbal response was used to demonstrate treatment effectiveness on role play scenes. Performance on role-play scenes, behavioural observations in freoplay situations and sociometric ratings were obtained during baseline, post-treatment and one-month follow-up. Improved performance did not generalise to the natural school setting and treatment did not affect peer ratings of peer acceptance. They concluded that social skills training programmes that do not show generalisation to the natural environment should be looked upon critically and should not be considered to be effective until proven otherwise. They were critical of the 'train and hope' approach in many studies of social skills, pointing out that other studies have equivocal results on measures of generalisation (Cooke & Apolloni, 1976). They also point out that different studies find no changes in the frequency of target behaviours in the training or natural environment, but have found changes on other criterion measures such as the distribution of peer interactions and the degree of peer acceptance (Oden & Asher, 1977).

Foss, Auty & Irvine (1989) in a two-year study examined four different formats for teaching employment-related interpersonal skills to secondary students with mild
retardation. Appropriate social interaction behaviours were taught either through teacher or videotape modelling, behaviour rehearsal and problem solving. The content taught was identical across the four formats. They found that all methods were effective in increasing student knowledge of content, with problem solving being the most effective. Surprisingly, perhaps, they found that behaviour rehearsal and teacher modelling combinations were the least successful format, and furthermore the most effective instructional format required the least class time.

Lewis (1994) investigated the effects of an analogue social skills programme and a teacher-directed contingency strategy on promoting social responding among four pre-school children with mild disabilities and their peers. Subjects were divided into pairs and received both interventions in a reversal design consisting of five lessons targeting the skill areas of initiating, responding and maintaining social interaction, promoting target children and providing verbal praise when socially involved with peers. Their results suggested that the teacher-directed contingency was more effective in promoting higher levels of social responding in a free play situation and that, interestingly, social skill training may not always be a prerequisite to promote increased social interactions.

Wiener & Harris (1997) developed and used a classroom-based social skills training programme which used a combination of social problem-solving approaches and coaching with 45, 9-12 year olds with learning difficulties in self-contained special education classes in Toronto, Canada. They obtained mixed results. The thirteen children in Intervention group 1 who received a 6 week intervention made ‘modest’ gains in social skills and decreases in problem behaviours compared with the control group as measured by self-report, teacher rating scales, peer nominations, and classroom and playground observations. However, equivalent changes were not made in Intervention group two, even though they received a 12 week intervention, twice that of Intervention group 1.
Swanson and Malone's (1992) meta-analysis of 39 studies indicated that children with special needs on average are more poorly accepted and more socially rejected than peers without special needs, they also suggest that between 16% and 22% of children with special needs are at least as well accepted as their peers without special needs. 

Ochoa and Olivarez (1995) conducted a meta-analysis of 17 sociometric status studies of children with special needs that used peer rating sociometric procedures. They found slightly lower peer rating effect size estimates but supported the well-established conclusion that children with special needs are less well accepted than their peers without special needs.

Kavale and Forness (1996) conducted a more comprehensive meta-analytic investigation of the degree and nature of social skills deficits of students with special needs based on a quantitative synthesis of 152 studies. They found that approximately 75% of students with special needs were less socially competent than their normal peers. These differences were consistent across peer, teacher and self-informant conditions and across different dimensions of social skill.

Therefore it is well established that children with special needs do indeed have social skills problems. However, not everyone is convinced that the effectiveness of social skills training programmes are as well established as some authors in the literature would have us believe although it is generally agreed that the younger the children, the easier the task (Royer et al., 1999).
3.6.3. RESEARCH EVIDENCE FOR EFFICACY OF SOCIAL SKILLS PROGRAMMES FOR CHILDREN WITH EMOTIONAL AND BEHAVIOURAL DIFFICULTIES

In contrast to the large base of research on children with special needs that concentrates on learning difficulties, there is a paucity of research on the sociometric status of children having emotional and behavioural difficulties. The little research that does exist suggests that these children are much more likely to be rejected by their peers without disabilities. There is, however, a great deal of research concerning the behavioural correlates of various sociometric groups such as rejected, neglected and controversial. Most children identified by schools as having emotional and behavioural difficulties are identified on the basis of an externalising behaviour pattern (aggressive, disruptive and noncompliant behaviour). This externalising behaviour pattern shows a high correlation with the sociometric status ‘rejected’ and it is therefore likely that many, if not most, children classified by schools as having emotional and behavioural difficulties would be assigned the sociometric status ‘rejected’ (Gresham & Macmillan, 1997).

Schneider (1992) in his meta-analysis of 79 studies of social skills training with aggressive and socially withdrawn students found that social skills interventions are only of moderate efficiency for increasing social competence in natural settings. He also found that programmes using modelling and coaching techniques (as used in the current study) produce greater effect sizes than those using primarily cognitive strategies. Another interesting finding was that evaluations made by teachers, parents and peers did not show consistent effects (again as for some staff in the current study). He also found that generalisation to other environments is problematic.

It has been noted earlier that the ‘acid test’ for social skills programs are studies investigating the naturalistic social behaviours of students with special needs in actual classroom settings. Unfortunately such studies are rare. For example, in an earlier
review, Gresham (1987) could only find four such studies: (Bryan 1974a, 1974b; Cooke & Apolloni, 1976; Odom, Jenkins, Speltz & De Klyen, 1982). Odem has since carried out more recent work in classroom settings (Odem Odem, McConnell & Chandler, 1993).

In an attempt to generalise treatment effects to naturalised settings Bierman, Miller & Stab (1987) implemented a staged programme of integration as follows. When children are believed to be 'ready' they interact with a highly structured naturalistic peer group. They are then encouraged to engage in dyadic interactions with an adult monitoring the social situation. The children are then placed in naturalistic groups of 'intermediate difficulty' such as a structured day camp (e.g. making arts and crafts). The final stage of the treatment is the placement in naturally occurring, semi-structured group settings, such as scouts.

Other attempts to improve peer relations by changing the school structure or social milieu and including the current 'good behaviour' policies which are becoming increasingly popular are based on the earlier work of Schneider (1992). Community-based programmes for reducing bullying and victimisation can be included in the above and involve distributing written information and video tapes about bullies and their victims to both school personnel and parents in all schools in Norway. Also early studies found academic tutoring to be more effective than social skills training for groups of low achieving rejected children. From these results it is postulated that it may be necessary to increase attentive classroom behaviours before it is possible to change peers' perceptions of them (Gresham & Macmillan, 1997).

In a more recent study Margalit, (1995) examined the effects of a computer-assisted social skills intervention on the social competence and behavioural adjustment of students with special needs in Israel. A group of 52 males with a mean age of 12, with either learning difficulties or behavioural disorders, felt less lonely and were more
accepted by peers as rated on peer-rated social acceptance and self-rated loneliness after the computer-assisted social skills intervention. However, self-control and maladjusted behaviours were teacher-rated, not self-rated, and no measures of self-esteem were taken.

A recent study by Royer et al., (1999) evaluated the effects of a social skills training programme with adolescents from a Quebec secondary school who experienced behavioural difficulties with social competence, behaviour and academic achievement. They found that the students declared a self-reported increase of assertion and empathy in the experimental group. However, teachers and parents perceived no differences in behaviour problems, academic skills or social skills.

Therefore, it should perhaps be remembered, that when reviewing studies investigating the social behaviours of students with special needs, the 'acid test' for social skills programs are in actual classroom naturalistic settings, using observations of social behaviours as well as pencil and paper inventories.
3.7. RESEARCH EVIDENCE FOR THE EFFICACY OF SOCIAL SKILLS PROGRAMMES INCLUDING A SELF-ESTEEM MEASURE

3.7.1. RESEARCH EVIDENCE FOR THE EFFICACY OF SOCIAL SKILLS PROGRAMMES INCLUDING A SELF-ESTEEM MEASURE FOR NORMAL STUDENTS

Although it is possible to find in the literature a great many programmes that have involved primary children or adolescents in social skills training, few studies examine the effects of their programmes on self-esteem. Most of the systematic research in self-concept among children with special needs has focused on students with mild mental retardation and/or students with learning difficulties. Little systematic research in self-concept has involved students with emotional and behavioural problems (Gresham & MacMillan, 1991). A number of different approaches have been used for improving children's peer relationships, including social skills training programmes, co-operative group work and social cognitive training (Malik & Furman, 1993). A few of these approaches have also investigated the training effects on children's self-esteem.

Early studies showed mixed results. For example, Altman & Fimesz (1973) using Coopersmith's Self-esteem Inventory to assess the effects of role-play in a counselling programme where the experimental group met for forty five minutes a week for ten weeks. Although there was a difference in favour of the experimental group scores as rated by their teachers on Coopersmith's Behaviour Rating Inventory, no significant differences were found on the self-esteem inventory. Elias & Allen (1991) compared 158 nine year olds, on three different methods for teaching social decision-making and problem-solving skills. They found that the 'directed' and 'discovery' but not 'standard' methods led to greater generalisation in self-concept and peer-related behaviours as well as application of the skills in an 'unpractised analogue' context.
Gearhart, Gentilcore, Rhinehart, Simon, & Simon (1977) attempted to raise the self-esteem of a group of 40 first grade children. Both the experimental group and the control groups experienced enhanced self-esteem scores at post-test but the differences were non-significant. Verduyn, Lord & Forrest (1990) in evaluating the effectiveness of a school-based social skills programme in three year bands of a Oxford middle school found no overall treatment effect using the Coopersmith Self-esteem Inventory. However, interactional effects were found between gender and age, with the younger age group, 9 and 11 year old, showing significant gains in self-esteem following treatment and persisting at follow-up. Ahrens, Barrett & Holtzman (1997) attempted to increase the use of applied social skills, concentrating on three main areas; improving conflict resolution skills, improving problem solving skills and improving self-esteem. Findings indicated that the students exhibited an increase in self-esteem as well as increasing their ability to recognise and resolve conflict and were able to communicate more effectively with both their peers and teachers. Lawson, McClain, Matlock-Hetzel, Duffy & Urbanovski (1997) described a school intervention programme consisting of middle school students, teachers, and adults who met weekly to discuss issues relating to academic performance, decision making, social skills and self-esteem. Evaluation results were 'successful'.

Haney & Durlak’s (1998) meta-analytic review of 116 intervention studies indicated significant improvement in children's and adolescents' self-esteem and self-concept, and significant concomitant changes in behaviour, personality, and academic functioning. They found that interventions specifically focusing on changing self-esteem and self-concept were significantly more effective than programmes focused on another target such as behaviour or social skills (though how one 'focuses' specifically and exclusively 'on' the hypothetical construct of self-esteem is difficult to imagine). They also found
that treatment groups were more effective than primary prevention programmes in changing self-esteem.

Bishop & Inderbitzen (1995) looked at the relationship between peer relations and self-esteem and although finding no difference in self-esteem recommended social skills training for children who lacked a close friend as a way of improving self-esteem. Another recent study was carried out in Israel. Shechtman & Bar-El (1996) had 211 Israeli adolescents complete Coopersmith's Self-esteem and a measure of their acceptance by classmates. They found improvements in social interaction and self-esteem. Unfortunately, studies in the literature examining the relationship between the social skills of children with special needs often seem to include the self-esteem measure almost as an afterthought.

3.7.2. RESEARCH EVIDENCE FOR EFFICACY OF SOCIAL SKILLS PROGRAMMES INCLUDING A SELF-ESTEEM MEASURE FOR SPECIAL NEEDS STUDENTS

One encounters mixed findings in the literature regarding the self-concepts of students with special needs. The literature is quite clear that students with, for example, learning difficulties have lower academic self-concepts than normal students (Bear & Minke, 1996; Chapman, 1988). Chapman's meta-analytic review showed an average effect size of -.88 between students with learning difficulties and normal students in academic self-concept. Bear & Minke's (1996) review of additional studies showed a similar effect size of -.79. However, research contrasting students with and without learning difficulties reveals a conflicting picture when looking at global self-concept or self-esteem. Chapman (1988) reviewed 21 studies in which students with learning difficulties and normal students were contrasted on general self-concept and found an effect size of -.50, with students with learning difficulties having lower general self-concepts than their
normal peers. Similarly, Kavale & Nye (1986) showed an effect size of -.535 between students with learning difficulties and their normal peers suggesting that approximately 70% of students with learning difficulties experience lower self-esteem than normal students. More recent studies, however, have found no differences between students with learning difficulties and their normal counterparts on global self-concept (Bear & Minke, 1996).

Earlier studies however, examining self-esteem differences between learning disabled and normal students yielded inconsistent results. Studies using global measures of self-concept such as Coopersmith's Self-esteem Inventory (1967) and the Pier's Harris Self-Concept Scale (1969) have produced no self-concept differences between learning disabled and normal populations whereas other studies, however, did find differences. This of course could have been an artefact of the particular inventories used (Gresham, 1987).

Some other earlier studies attempting to improve the self-esteem of young people with special needs using social skills programmes also produced mixed results. For example, Maskin & Fletcher (1975) in studying the effects of two 'institutional correction programmes' on the self-esteem of 60, 15-17 year old male juvenile delinquents found that at post-test the parent-child interaction group was significantly superior to the work oriented, individual and vocational personal skills intervention.

Eldridge, Witmer, Barcikoski & Bauer (1977) used a group guidance programme entitled 'Development of Self and Others' (DUSO) with 24 educable mentally retarded children aged between 8 and 12 in 20 randomly selected, intermediate-level special classes. Two treatment groups were used comprising of 85 sessions of DUSO or the teacher's usual method for self-esteem improvement. Again, although self-esteem improvements were found in both groups no significant differences between the two treatment groups were found.
Wanat (1983) working with learning disabled adolescents, used a 16 week social skills school programme, finding significant differences on two self-esteem inventories for the experimental group. Other evidence for poorer self-concepts of mainstreamed handicapped children has been found in some early studies and in earlier reviews of the literature. This older batch of studies does however demonstrate that students with learning difficulties have lower academic self-concepts using scales specifically designed to assess this construct. Deficits in academic self-concept usually co-exist with poor peer acceptance/rejection, deficits in positive social behaviours and excessive negative social interaction patterns (Gresham & MacMillan, 1997).

In a recent review of the research literature Gresham & MacMillan (1997) found that students with special needs/learning disabled were poorly accepted, neglected or rejected by their peers in mainstream classrooms. They exhibit deficiencies in the areas of interpersonal behaviours, self-regulated behaviours and task-related behaviours. These children also have problems with motivational deficits with low expectations for success, deficits in perceived self-efficacy and self-esteem which result in the avoidance of situations and tasks in which they otherwise might succeed.

3.7.3. RESEARCH EVIDENCE FOR EFFICACY OF SOCIAL SKILLS PROGRAMMES ENCOMPASSING A SELF-ESTEEM MEASURE FOR CHILDREN WITH EMOTIONAL AND BEHAVIOURAL DIFFICULTIES

It is generally well recognised that children with special needs, and particularly those with emotional and behavioural difficulties experience problems with social skills (Cooper, 1996a; Gresham & MacMillan, 1997; Gresham et al., 1998). Although there is, for example, a great deal of research concluding that there exists a positive correlation between academic achievement and corresponding academic self-concept components,
(Chapman, Lambourne & Silva, 1990; Martin & Debus, 1998; Versi, 1995) there is, unfortunately, much less research on the relationship between self-concept/self-esteem, and variables such as social skills, especially with children having emotional and behavioural difficulties (Haugen & Lund, 1999).

Another concern is that very few studies attempt to improve the self-esteem using social skills interventions involving children with emotional and behavioural difficulties in actual classroom situations. The few studies that exist do generally record positive results although the overall findings are equivocal. This of course could be an artefact of what is sometimes termed the 'file draw effect' (under-reporting of negative research findings). Poor social skills can have a detrimental effect on children's self-concept as well as damaging peer relationships and personal development (Kauffman, 1993) which can lead to problems with school adjustment, leading to criminality and mental health problems (Greene, Biederman, Faraone, Sienna & Garcia-Jetton, 1997; Parker & Asher, 1987). These behaviour patterns can have long-term effects on children's adjustment status in later life and it is possible to predict adult mental health problems from earlier difficulties with self-concept (Gresham et al., 1998; Rock et al., 1997). It is therefore imperative that intervention programmes are assembled and implemented as soon as possible.

Twoey (1997) maintained that children with ADHD, for example, suffer from a loss of self-esteem which interferes with their ability to make friends and act in socially appropriate ways, so professionals should be examining ways to rebuild self-esteem through social skills education.

In a recent review of the empirical research examining the social competence and affective functioning of children with special needs/mild disabilities (that includes emotional and behavioural difficulties), Gresham & MacMillan (1997) found conflicting
evidence in the literature for general levels of self-esteem. Children with special needs were, for example, found to have difficulties in negotiating both peer-related and teacher-related adjustments in school settings, to have poorer social skills, to exhibit more interfering problem behaviours, and were poorly accepted or rejected by peers. Unfortunately there is relatively few data to inform us regarding the extent to which children with emotional and behavioural difficulties are differentiated by self-concept, as little systematic research has been done with these children (Gresham & MacMillan, 1997).

Gresham et al. (1998) found in their study of a differentiated group of emotionally and behaviourally disturbed children compared with a ‘normal’ control group of children that the three groups did not differ from controls on measures of social self-concept, academic self-concept and general self-esteem. The children were split into two groups, and compared with a ‘normal’ control group. They found that contrary to much theorising in the literature, average levels of academic self-concept did not differ when they examined 231 third graders showing a comorbid behaviour pattern of hyperactivity-impulsivity-inattention and conduct problems, with children having internalising and externalising problems and matched controls. Furthermore, the groups did not differ from controls on measures of social self-concept, academic self-concept and general self-esteem. However, they did find that the most marked differences between the three groups were found on peer measures of rejection and friendship and teacher ratings of social skills. On average, almost two thirds of the hyperactivity-impulsivity-inattention and conduct problems group were rejected by their peers compared with one third of the internalising and externalising problems group and only 12.5% of the matched controls.

Other researchers have also found evidence that emotionally and behaviourally disturbed children in integrated classrooms tend to experience problems in peer relationships. According to Bevington & Wishart (1999) who examined the influence of
classroom peers on cognitive performance in children with behavioural problems who were attending two special schools for children with emotional and behavioural difficulties in Scotland ‘the fact remains, however, that children with behavioural problems disrupt their own education and also that of their classmates’ (p.32).

Earlier studies of the social skill of sharing with emotionally and behaviourally disturbed children did not measure self-esteem. For example, Bryant & Budd (1984) in examining Barton & Ascione’s (1979) package for training sharing in a classroom setting with six behaviourally handicapped pre-school children found that substantial increases in sharing occurred. The training consisted of initial instructions, modelling and behavioural rehearsal followed by teacher prompts and praise in a multiple-baseline design across three pairs of children. Seven child behaviours and four teacher behaviours were recorded on their occurrence in 10 second intervals with each behaviour able to be recorded only once per interval. Training was carried out by the regular class teacher in the context of ongoing classroom activities and demonstrated practical validity beyond, as Bryant & Budd state, ‘contrived experimental settings’. Sharing behaviours increased and negative interactions decreased in five of the six children. Informal support for generalisation of training effects on a 21 item behavioural checklist provided evidence that five of the children were less selfish following training and at follow-up. Bryant & Budd offer their programmes as a tool for more sophisticated response analysis of the components involved in sharing with pre-schoolers as they point out that few sharing studies have been conducted with children who evidence serious social deficits. In fact until 1984 no study using Barton & Ascione’s (1979) comprehensive training package has involved children with previously identified social deficits or developmental delays.

In a more recent study (Frankel & Myatt, 1996) maintained that very little is known about the relationship between children’s reported self-esteem and their behaviour and in order to investigate this relationship they administered the Piers Harris Self-Concept
Scale to 59 ‘non-psychotic’, 7-12 year old boys referred to an outpatient children's social skills programme. They found that social competence and externalising behaviour were positively related to self-esteem.

Poirier (1991) developed a practicum to increase self-esteem, reduce anxiety and improve social skills in 13 ‘emotionally handicapped’ middle school boys. The 8 month multifaceted programme consisted of social skills training, Budzynski's Relaxation Programme a self-improvement programme and parenting education classes. Self-esteem was improved on only one of the two measures of self-esteem (Coopersmith's and Coopersmith/Gilbert Behavioural Academic Self-esteem).

O'Dell, Rak, Chermonte & Hamlin (1994) examined 18 ‘at risk’ and 49 control 3rd and 4th graders who participated in a group intervention programme designed to improve their self-concept, school behaviour, grades and feelings of success. The group sessions were goal oriented but focused on issues identified by the participants such as making and keeping friends. Self-concept as measured by the Piers Harris Self Esteem Inventory improved.

Wright (1996) in a study involving ‘conduct disordered’ boys in residential treatment implemented a cognitive behavioural social skills training programme designed for preadolescents, (diagnosed as ADHD and or/learning disability). Her cognitive behavioural social skills training programme involved three major goals of improving social skill competency, enhancing self-esteem and increasing self-control. She found consistent improvement in social skill competency, and significant positive changes in self-esteem and self-control. She also found potential long-term benefits at a twelve month follow-up.

However, Valliant, Jensen & Raven-Brook (1995) examined the effectiveness of cognitive behavioural therapy and social skills training on 39, 16-18 year olds; 25 were in custody, 5 were on probation and 10 were enrolled in secondary schools in Canada.
They found that the mean scores pre-and-post test results of intelligence, self-perception and hostility and self-esteem as measured by Coopersmith's self-esteem inventory after cognitive behaviour therapy and social skills training were not significantly different for the three groups.

3.8. SUMMARY

It is apparent from the above section that children with emotional and behavioural difficulties have social skills deficits (Gresham & MacMillan, 1997) and that social skills interventions can improve self-esteem, though not as well as interventions specifically designed to improve self-esteem (Haney & Durlak's 1998 meta-analytic review). What is less clear-cut is the evidence for children with emotional and behavioural difficulties having low levels of self-esteem and the relationship between these variables and social skills, as little systematic research in self-concept has involved students with emotional and behavioural difficulties and social skills (Gresham & MacMillan, 1997; Gresham et al., 1998). The social skills intervention in the current study was designed to investigate these presumed relationships.
3.9. CO-OPERATIVE LEARNING OVERVIEW

In this section we examine the practice of co-operative learning, the second intervention in the study that attempted to enhance the children’s self-esteem, and, other independent variables. Initially, we examine the rationale for using a co-operative learning intervention with children. Then, various definitions of co-operative learning are given, followed by a brief summary of the history of co-operative learning. A theoretical overview of the efficacy of co-operative learning in fostering academic achievement and social acceptance is then presented, followed by the theoretical relationship between self-esteem and co-operative learning. Following this, we examine the research evidence for and against the efficacy of co-operative learning with normal students, then those with special needs and finally those with emotional and behavioural difficulties. This is followed by the research evidence for and against co-operative learning on improving self-esteem with ‘normal’ students, then those with special needs/learning disabilities and finally the research evidence for co-operative learning’s efficacy in raising the self-esteem of emotionally and behaviourally disturbed students.

3.10. RATIONALE FOR CO-OPERATIVE LEARNING

Research on co-operative learning has tended to be empirically rather than theoretically orientated and has lacked paradigm integrity. However, more recent research on the role of co-operation in learning has tried to elaborate theoretical paradigms. There are, however, important differences among various theoretical and practical understandings of co-operative learning. Researchers emphasise the changes in motivation structure brought about by certain forms of co-operative learning, whilst others hold that changes in the task structure are all that is required to enhance learning. Because co-operative
learning typically changes both task structure and motivation, it is difficult to find any single theoretical explanation for changes in achievement.

In order to help ameliorate this, Slavin (1997) has presented four major theoretical paradigms in order to explain the achievement effects of co-operative learning: motivation, social cohesion, developmental and elaboration perspectives. Motivational paradigms focus on the reward or goal structures whilst children are in a co-operative environment. The only way group members can attain their individual goals is if all the members of the group are successful. Group members must both help their peers to help the group succeed and encourage them to exert maximum effort.

The social cohesion paradigm is related to the motivational viewpoint, where the effects of co-operative learning on achievement are mediated by the cohesiveness of the group, emphasising primarily motivational rather than cognitive explanations for the instructional effectiveness of co-operative learning. There is however, an important difference. Motivational theory stresses extrinsic rewards – children help their peers to learn as it is in their own interests to do so. Under the social cohesion paradigm, however, the children help their peers learn as they care about the group. The social cohesion paradigm emphasises team-building activities in preparation for co-operative learning, as well as group evaluation instead of individual accountability and external incentives. The Jigsaw method is a well-known application of this paradigm. Children concentrate on different topics in ‘expert groups’ and subsequently share their expertise when all expert groups come together. Interdependence is created between the group members in a way that would increase social cohesion. However, Slavin (1995), found in his review that Jigsaw methods can be problematic in so far as children may only become acquainted with the material that they have studies themselves.
The third paradigm for explaining the mechanisms of co-operative learning proposed by Slavin was developmental theory which maintains that interaction among children engaged in appropriate tasks increases their mastery of critical concepts.

The fourth and final paradigm is that of cognitive elaboration in which co-operative learning is assumed to be effective because it requires children to elaborate their cognitive structures in a social context, with one of the most effective strategies being elaborating their strategies to someone else.

One of the most important skills that children need to learn, beginning at an early age, is co-operating and sharing with their peers. Yet some children are very reluctant to share (Siperstein & Leffert, 1999). According to Stanne et al., (1999) motivation to achieve is based on the perceived likelihood of being able to attain a challenging goal. Those who believe they cannot win will not try, will cheat, avoid challenge, use superficial and effort-minimising strategies, engage in impaired problem solving, use other self-handicapping strategies, and have less interest and enjoyment of the experience.

The appeal of co-operative learning is enhanced by the possibilities it offers for achieving multiple educational goals. Although academic learning is of primary concern in schools, teachers are also deeply concerned about their students’ social and personal development. Co-operative learning, with its dual emphasis on academic and interpersonal skills appeals to teachers because it addresses and integrates seemingly diverse goals within a single approach (Antil, Jenkins, Wayne & Vadasy, 1998). According to Slavin (1990):

‘co-operative learning is expected to enhance student achievement because it increases motivation to learn (because peers support learning), because students can provide explanations to one another within the proximal zone of development of
their peers, because students learn by teaching others, and because students can provide one-to-one assessment and assistance tailored to each others' unique needs... However, it is important to note that co-operative learning has only been successful in enhancing student achievement when it incorporates two elements: group goals and individual accountability’ (p.178).

Children with emotional and behavioural problems are generally recognised as having problems with self-esteem (Gresham & MacMillan, 1997). They also have problems co-operating with their peers (Pomplun, 1997). It is postulated that co-operative learning can benefit children with emotional and behavioural difficulties. According to Townsend, Moore, Tuck & Wilton, (1998) a number of reviews (see Totten et al., 1991) have shown co-operative learning to benefit children in a range of cognitive, social and affective factors, suggesting that co-operative learning may be effective in increasing self-esteem and feelings of competence. This occurs as co-operative learning reduces (academic) anxiety by, for example, reducing stress associated with feeling isolated as an individual, promoting a better working climate among children with similar fears facing the same problems, increasing the vicarious reinforcement available in a highly interactive environment and making children feel more able to perform (Johnson & Johnson, 1987; Slavin, 1990; Townsend, Moore, Tuck & Wilton, 1998).

Deutsch (1949) theorised that a direct consequence of co-operative experiences is a positive cathexis in which the positive value attached to another person's effort to help achieve one's goals becomes generalised to the person. Based on the above, it is predicted that by using co-operative learning procedures this study should also be able to enhance positive impacts on attitudes to classmates and school, interactional attitudes and prosocial behaviours, for children with emotional and behavioural difficulties.
The low levels of self-esteem attributed to children with emotional and behavioural difficulties are presumed to be raised by co-operative learning interventions. However, this relationship is much more tenuous than is generally assumed/portrayed in the literature, as little actual research on children with emotional and behavioural difficulties has been carried out in relation to these variables.

3.11. DEFINITIONS OF CO-OPERATIVE LEARNING

There is no agreed definition of co-operative learning. However, most definitions are in broad agreement. For example, Horn, Collier, Oxford, Bond & Dansereau (1998) claim co-operative learning is where ‘two or more individuals take turns helping one another learn information’ (p.153). Bryant & Bryant (1998) maintain that co-operative learning is ‘a common instructional arrangement that is used by classroom teachers to foster academic achievement and social acceptance of students with and without learning disabilities’ (p.41).

Margolis (1990) refers to co-operative learning as ‘a broad array of instructional strategies ..... which can be quite diverse and take a variety of forms.... including peer teaching, jigsaw groups and group projects’(p.310). He cites how the co-operative learning methods of Class Wide Peer Tutoring, CWPT, and Team Research Report, TRR, show how ‘co-operative learning strategies can differ in structure, curriculum goals and cognition's tapped’ (p.310).

Slavin & Stevens (1991) maintain that there are ‘simple’ and ‘complex’ co-operative learning methods. Simple ones are those of Johnson & Johnson (1987) and Student Teams Achievement Division STAD. More ‘complex’ ones are Team Assisted Individualisation, TAI, and Cooperative Integrated Reading and Composition, CIRC. In
fact Kagan (1989) maintained ‘there are a myriad co-operative learning strategies available’.

Nevertheless, it is maintained by some researchers, for example, Cosden & Haring (1992) that co-operative learning is taking place so long as students are randomly or systematically assigned to heterogeneous groups or teams where teachers might or might not provide direct instruction and that thereafter assignments are structured so that: (a) students realise each needs to succeed to achieve mutual goals, (b) success is contingent upon students’ strengths, (c) students are encouraged to co-operate with each other and (d) students discern that they are responsible for each group member’s achievements as well as their own, then co-operative learning is deemed to have taken place. Learning occurs under a variety of configurations using individual and group activities in which students support and contribute to the learning of other members of the group to which they are assigned.

Many teachers use co-operative group approaches to academic learning (Gillies & Ashman, 1998). Children are usually divided into teams that may contain children of differing abilities, ethnic backgrounds and both genders. The teams are usually equated in terms of academic ability and after a few team-building exercises children then begin to work together. As they teach each other academic tasks, they learn the social and instructional skills that are necessary to maintain group cohesion and maximise learning. The teams may then compete against their own previous performance or against other teams (Slavin, 1990). Scoring is usually based upon improvement rather than overall achievement so that all children have an equal opportunity for success.

In 1987, Johnson and Johnson enumerated four basic elements that must be included in order for small group learning to be truly co-operative. The first is 'positive interdependence', that is, students must perceive that they either 'sink or swim together'; secondly, face to face interaction; thirdly, individual accountability and fourthly co-
operative learning requires that students appropriately use interpersonal and small-group skills. An additional component of 'Group reflection' (Brown & Thompson, 2000) is also recommended, although this is often left out in practice. Therefore placing socially unskilled students in a learning group and telling them to co-operate will not be successful. Students have to be taught the social skills needed for collaboration.

3.12. THE HISTORY OF CO-OPERATIVE LEARNING

Co-operative learning is not a new phenomenon. Throughout history, teachers have used combinations of co-operative, competitive and individualistic instruction (Johnson & Johnson, 1987). Stanne et al., (1999) maintain that the Talmud clearly states that in order to learn one must have a learning partner. In the first century Quintilian argued that students could benefit from teaching one another as later did Comenius (1592-1670, cited in Stanne et al., 1999).

In the late 1700s, Lancaster and Bell made extensive use of co-operative learning groups in England and a Lancasterian school was opened in New York in 1806. The Common School Movement in the U.S. in the early 1800s placed a great deal of emphasis on co-operative learning. Parker in the last three decades of the nineteenth century, when superintendent of the public schools in Quincy, Massachusetts, attracted more than 30,000 visitors a year to examine his co-operative learning procedures. Following Parker, Dewey promoted co-operative learning groups. In the 1930s the destructive effects of competition were pointed out by Mead (1937) and in the 1940s by Deutsch (1949). As long ago as 1959 research by Coleman, and then in the early 1970s Bronfenbrenner and Spilerman, provided consistent evidence that when classrooms are structured competitively or individualistically, success at academic tasks has less value for children with special needs. Success for the more able and successful student in a
competitively structured classroom has also been found to have a negative effect upon the self-perceived sociometric status of children with special needs (Slavin, 1987). Competitively or individualistically structured classrooms encourage students to believe that they can only obtain their goals if, and only if, the other students in the class fail to obtain theirs (Deutsch, 1962). Individuals believe that the achievement of their learning goals is unrelated to what other students do. Research into co-operative learning methodology, therefore, began in the early 1970s, particularly in response to acute racial tension in U.S. schools, but also as an attempt to reduce the isolation and hostility perceived to exist in many highly competitive classrooms (Carpenter & Apter, 1987).

Today there is a plethora of research which demonstrates that there is a substantial data base accumulated on the efficacy of co-operative learning. It has been found to be a very powerful tool for both academic and affective learning as noted in Slavin’s review (1987) and other research (Axelrod & Greer, 1997; Bryant & Bryant, 1998; Leikin & Zaslavsky, 1997; Stanne et al., 1999).

3.13. THEORETICAL EVIDENCE FOR THE EFFICACY OF CO-OPERATIVE LEARNING IMPROVING SELF-ESTEEM

Theoreticians have been interested in the relationship between self-esteem and co-operative learning as these variables are often linked in the research literature. In examining the theoretical relationship between co-operative learning and self-esteem, Shavelson and Bolus (1982) postulated that the school itself could exert a powerful influence on the intervening variable of self-esteem. As school is considered by most to be the second most important environment in the development of self-concept, after the home (Shavelson and Bolus, 1982) it can be a major determinant of self-esteem. Social
relationships with peers most often develop through the school environment and their co-operative relationships serve as the feedback source for the development of self-esteem.

Although there can be little doubt that competition is prevalent and widespread in almost all societies, critics have argued against the negative effects of competition and for co-operation. They point out that competition can result in high anxiety levels, lowering extrinsic motivation and contingent self-esteem. This in turn may interfere with performance and cause low productivity. It may also cause poor relationships, cheating and aggression toward others in an effort to win at all costs (Stanne et al., 1999).

Norem-Hebeisen & Johnson (1981) posited that there are four primary ways of deriving self-esteem from information about oneself:

- Basic self-acceptance (a belief in the intrinsic acceptability of oneself)
- Conditional self-acceptance (acceptance contingent on meeting external standards and expectations)
- Self-evaluation (one's estimate of how one compares with one's peers)
- Real-ideal congruence (correspondence between what one thinks one is and what one thinks one should be)

They found that attitudes towards co-operation were related to basic self-acceptance and positive self-evaluation, attitudes towards competition were related towards conditional acceptance, and individualistic attitudes were related to basic self-rejection. Ames (1981) for example, pointed out that there has been relatively little research studying how co-operative as against competitive reward structures affect these mediating thought processes. The studies that have attempted to identify the variables that mediate the relationship between co-operative group experiences and learning outcomes are again very few in number (Knight & Bohlmeier, 1990; Gilles & Ashman, 1998).
However, the work of Shavelson & Bolus (1982) Stanne et al., 1999 and Norem-Hebeisen & Johnson (1981) for example, suggests a direct link between co-operative learning interventions and increased self-esteem.

3.14. THE RESEARCH EVIDENCE FOR THE EFFICACY OF CO-OPERATING LEARNING PROGRAMMES FOR STUDENTS

3.14.1. THE RESEARCH EVIDENCE FOR THE EFFICACY OF CO-OPERATIVE LEARNING FOR NORMAL STUDENTS

Co-operative learning is arguably one of the best examples of a contemporary teaching practice. It is the product of theoretical and applied research evolved over three decades from the fields of social relationships, group dynamics, learning and instruction. It is also an active and fertile area of systematic enquiry in education with over 550 experimental studies and 100 correctional studies on this experimental approach (Johnson & Johnson, 1992). Co-operative learning has also been successfully used in such diverse situations such as promoting narrative writing in small groups, problem solving in maths and promoting conceptual understanding in physics. In the affective area, it has been used to develop positive attitudes towards other group members and motivation to learn. Co-operative learning studies with typical students have also been found to positively influence variables more directly related to emotional disturbance, such as locus of control (Slavin, 1987a) and other motivational attitudes (Antil, Jenkins, Wayne & Vadasy, 1998).

Johnson, Maruyama, Johnson, Nelson & Skon (1981), in a meta-analysis of 122 studies from 1924 to 1981 show students in co-operative programmes performed in the 80th percentile academically compared with children in traditional academic situations.
Stanne et al., (1999), in their meta-analysis of 64 studies, maintain that it is probably fair to state that there are enough well-supported findings from numerous research studies accumulated over the years to justify the statement that it is no longer necessary to defend co-operative learning as an instructional strategy that promotes learning. They examined the relative impact of co-operative, competitive and individualistic efforts on motor skills performance and found that for all comparisons, co-operation resulted in greater interpersonal attraction, social support and self-esteem. The idea that children learn best in competitive conditions and that competition is essential in maintaining high rates of performance was challenged in an earlier meta-analysis of 122 studies conducted by Johnson et al., (1981). They found that co-operation is superior to both competitive and individualistic efforts in promoting achievement and productivity. They also found, perhaps surprisingly, that co-operation without intergroup competition will promote higher achievement and productivity than will co-operation with intergroup competition. Earlier programmes with adolescents in co-operative learning programmes have also demonstrated positive impacts on attitudes to classmates and school, interactional attitudes and prosocial behaviours. Increases in altruistic behaviours and emotional perspective-taking have also been observed.

Resolving conflicts over limited resources is a difficult social task, with children reporting poor relationships with peers leading to adverse consequences in school. Therefore co-operative strategies are needed to help overcome these difficulties and in order to establish and maintain friendships it is necessary in some situations to strike a balance between competition and co-operation, especially for boys. (This tells us, therefore, that an overemphasis on co-operative learning in the classroom may not be a good thing!) Given that poor peer relationships in childhood are a predictor of maladjustment in adolescents and adulthood, it is important to tackle these problems at the earliest possible opportunity and some studies suggest that co-operative games can
increase sharing as well as encourage stronger peer relations. Allied to these findings are those of aggressive behaviours in childhood and adolescents that have become an increasingly serious problem. Aggressive behaviours that are apparent by middle childhood, even those of a mild nature, are predictive of future antisocial behaviour (Gresham & MacMillan, 1997; Rock et al. 1997).

Bay-Hinitz, Peterson & Quilitch (1994) investigated the effects of competitive and co-operative games on aggressive and co-operative behaviours of 70 children aged 4-5 from four classes in three pre-schools. The experimental design included both multiple baseline and reversal components. The behaviours were recorded twice daily, five days a week in 30 second intervals with the entire group scanned sequentially during observations ranging from 10 to 30 minutes. They found that co-operative behaviour increased and aggression decreased during co-operative games, whereas conversely competitive games were followed by increases in aggression and decreases in co-operative behaviour. Similar effects were found during free play sessions.

Bierman et al., (1987) investigated four treatment conditions with 32 boys in grades 1-3 who were rejected by their peers in an effort to improve their social behaviours and peer acceptance. Interventions were applied during ten half-hour school play sessions with peer and teacher ratings collected prior to the treatment, after treatment and at a follow-up assessment six weeks after assessment and again at a one year follow-up. Behavioural observations were in operation with each boy observed during each of two 15 minute small group play sessions. Coding categories for play included positive, negative, neutral and a no interaction description. Each of the treatment conditions involved a target child engaged in a series of co-operative tasks with non-targeted classmates. Peer acceptance was measured by positive nominations. However, play ratings received from male classmates revealed no treatment effects. This was in spite of the reductions in negative behaviour observed for treated boys during naturalistic peer
group interactions. Although not all studies show consistent effects, there is some evidence that co-operative behaviours will generalise to free-play periods after lengthy exposure to co-operative games. (This will be examined in the current study.)

Not all research has found positive results for co-operative learning. Although numerous studies have documented that children in co-operative learning programmes usually learn more and never learn less than those working individually or in a competitive context, most of the studies have been conducted with children in the early grades (Malik & Furman, 1993). Other caveats have been found. For example, Slavin (1987) found that co-operative learning has only been successful in enhancing student achievement when it incorporates the two elements of group goals and individual accountability, with most of the group scores being based upon the average of all group members.

Some early studies sounded notes of caution on the participation of some members in co-operative situations arguing that heterogeneity in co-operative group performance can interfere with motivation, depress feelings of satisfaction and lead to rejection of low-performing members. Others have commented that in co-operative tasks, the input of individual members is often quite disproportionate, with some members contributing a great deal and others very little. Thus whether individuals share a perception of being successful may depend on their individual level of performance. As co-operative groups can fail as well as succeed, the relative benefits accrued from co-operative structures may depend on the success of the group in achieving its goal (Malik & Furman, 1993).

However, Bierman's (1986) research suggested that working co-operatively with disliked classmates in conditions that support positive interactions increases positive peer responding. However, only the combinations of 'instructions' and 'prohibitions' interventions led to improved sociometric ratings from partners.
More recently, some researchers have also remarked that co-operative structures are not necessarily the panacea for all situations, and introduced some interesting observations on co-operative structures as well as providing research evidence for caution, especially for students with special needs and particularly those with emotional and behavioural problems (Pomplun, 1997). However, it can be seen from the above that evidence in the literature for the efficacy of co-operative learning for normal students is encouraging.

3.14.2. THE RESEARCH EVIDENCE FOR THE EFFICACY OF CO-OPERATIVE LEARNING FOR SPECIAL NEEDS STUDENTS

Co-operative learning has been widely advocated to foster both academic achievement and social acceptance of students with special needs/learning disabilities. Students work in small heterogeneous groups to accomplish tasks by modelling correct academic responses, practising skills and providing feedback, sharing in reinforcement contingencies, and engaging in social interactions. Some researchers advocate co-operative groups as one way to achieve large-scale mainstreaming of students with disabilities. This is based on findings demonstrating that inclusion in heterogeneous co-operative groups results in higher academic achievement and attitudes as well as higher self-esteem than when traditional mainstreaming or segregated services are used (Bryant & Bryant, 1998).

Co-operative learning conditions as compared with no-treatment and individualised instruction conditions have produced social benefits (i.e. less social rejection) for students with disabilities. Other earlier studies have also documented the success of co-operative as against competitive learning or group contingencies in improving the
academic and social behaviours of mainstreamed students with handicaps (Stanne et al., 1999).

Slavin (1987) describes two co-operative learning approaches that have been used and evaluated as means of helping 'academically handicapped' students. One category includes 'simple' methods such as Johnson's methods and Student Teams Achievement Division, (STAD). The other category includes 'complex' methods such as Co-operative Integrated Reading and Composition (CIRC) and Team Assisted Individualisation (TAI).

From its inception one of the most important applications of co-operative learning has been to facilitate the return of children with special needs to mainstream schooling. Two major co-operative learning methods have been used and evaluated as methods of mainstreaming children with special needs. These are: 'simple' methods which use class paced instruction and are generic, in the sense that that they can be applied to virtually any content and to any age, and 'complex' methods that accommodate instruction to individual needs, incorporating specific curriculum materials, and are designed for use in particular subjects and ages. Examples of 'simple' methods are the Johnsons' methods (Johnson & Johnson, 1987) where students work in 4-5 member groups to complete common assignments. Students are given training in social skills and the groups are praised and rewarded. Other 'simple' methods are Student Teams Achievement Division (STAD). In STAD, students with special needs are assigned to four member heterogeneous learning teams. After the teacher presents the lesson, students are given the opportunity to work together to help one another master the material. They are assessed and receive points based on the degree to which their scores exceed those previously attained. These improved points are then averaged to form team scores.

Examples of 'complex' methods are Team Assisted Individualisation (TAI). TAI combines co-operative learning with individualised instruction to meet the needs of diverse classrooms. It was designed to combine the motivational power and peer
assistance of co-operative learning with an individualised instructional programme in mathematics. Students are assigned to 4-5 member heterogeneous groups and pre-tested on mathematics operations. They are then placed at the appropriate point in the individualised programme based on their performance. Students then work in their teams on self-instructional curriculum materials. Every day the tutor teaches lessons to small groups made possible as students take responsibility for almost all checking and marking. At the end of the week the teacher calculates a score based on the average number of units covered by each team member and the accuracy of the test units. Rewards are allocated based on agreed criteria. After every three weeks individualised programmes are stopped and a week is spent teaching whole class lessons.

Other 'complex' methods used to aid reading, writing and language skills are Cooperative Integrated Reading and Composition (CIRC). Students are assigned to pairs within their reading groups. The pairs are then assigned to teams composed of partnerships from two different reading groups (two from top, two from bottom group). Some of the work is done in pairs whilst other tasks involve the whole team. Most of the time the students work independently of the teacher.

The simple methods use class-paced instruction and are generic in the sense that they can be applied to any content and at all grades. The complex methods employ means of accommodating instruction to individual needs, incorporate specific curriculum materials and are designed for use in particular subjects and grade levels. Research on simple methods have used sociometric and observational measures to assess the effects of co-operative learning.

Early studies by Johnson & Johnson (1981) found that co-operative learning was good for classroom working relationships. They examined the effects of 41 students having co-operative and individualistic learning experiences by using a sequential time-sampling method of observation. Each student was observed for 10 seconds followed by
a 5 second interval to record behaviours. Results for the four dependent variables of interactions between handicapped and non-handicapped students, amount of off-task behaviour, interaction during sessions and sociometric nominations all proved statistically significant.

In another study, where unfortunately, contamination between experimental groups weakened the research, Slavin, Madden & Leavey (1984) found some indications that co-operative learning could positively affect the sociometric status of mildly handicapped, elementary-aged children in mainstream education. Although there are some detracting results from some studies, the research on co-operative learning structures for children with and without special needs in fostering academic achievement and social acceptance is generally positive, with various academic and social benefits described in studies in the research literature (Bryant & Bryant, 1998).

The research evidence for the efficacy of co-operative learning is not all positive and co-operative learning is not without its critics. Some suggest that co-operative learning's emphasis on groups short-changes some individuals and others take issue with its efficacy with various types of learners. Even within practitioner ranks there are disagreements over the specifics of its methods (Slavin, 1987). So, although co-operative learning has a large body of research extolling its effectiveness, not all educators are equally convinced of its efficacy.

There have been various reasons given for the problems some children with learning difficulties have when they encounter co-operative learning practices. For example, some students with learning difficulties may encounter barriers that impede their success with co-operative activities, such as reading, writing, spelling, handwriting, memory, motor and mathematics skills needed to meet the demands of co-operative learning. Furthermore, differences in results, especially for children with learning difficulties could in part be due to the efficacy of co-operative learning which may depend upon a
number of factors, some of which are prior training in group skills, training in co-operative scripts, and the nature of the social interaction. Other factors could be the presence of group and individual rewards. For example Slavin (1983, 1996) in two separate reviews found that students' achievements increase when they are rewarded for their co-operative efforts. Other researchers have found that the type of learning task can affect performance, as can individual learner characteristics. Other factors found were that high ability individuals may be better learning facilitators than individuals who lack the necessary cognitive skills. Earlier studies have found that academically, however, students with LD have not fared consistently better in co-operative learning conditions than in individualised conditions. Some researchers have posited that students with LD may need instructional adaptations during co-operative learning because they do not possess the skills, academic or collaborative, to successfully accomplish the tasks inherent in co-operative activities (Bryant & Bryant, 1998).

King (1993) studied eight low achieving 3rd graders in co-operative maths groups and found the low-achievers were frequently passive and lacked interest in the proceedings. O'Connor & Jenkins (1995) examined twenty two students with disabilities and found that in co-operative situations involving reading they made fewer contributions to the group, only participating 40% of the time compared to the non-disability group.

Siperstein & Leffert (1999) in their study, mentioned earlier, of children with learning problems (resulting from mental retardation and cognitive delay) sound a cautionary note. They found that children with and without learning problems responded differently to an actual limited resource problem. For example, Siperstein & Leffert (1999) found that when comparing 56 children with learning difficulties with 56 children without learning difficulties, they did not differ in their strategies for responding to hypothetical problems. They found that in both real and hypothetical situations, there
was no difference between the two groups in their reported level of sharing in a
hypothetical situation, but when it came to actually having to share, only 15% of the LD
group would share, whereas 58% of the non-learning disabled group would.

Whilst some studies have proposed co-operative groups as a method to increase the
mainstreaming and participation of children with disabilities and have found positive
achievement and social skill gains for students with disabilities in co-operative groups,
other researchers have questioned their assumptions. Pomplun (1997), when examining
the nature and influence of co-operative group participation of children, raised questions
about the nature of participation for some special needs students in the co-operative
groups.

Other researchers have also been concerned with the nature of participation in co-
operative groups by 'low achievers' and students with disabilities. For example, King
(1993) found low achieving students were frequently passive, unable to take command
of the learning situation, and lacked influence on group processes. O'Connor & Jenkins
(1995) found that students with disabilities made fewer contributions and received more
help.

Therefore, although there is a great deal of research evidence for the efficacy of co-
operative learning for special needs students, there are some researchers who
nevertheless question the nature of participation for some special needs students in co-
operative groups.

3.14.3. THE RESEARCH EVIDENCE FOR THE EFFICACY OF CO-OPERATIVE LEARNING
FOR CHILDREN WITH EMOTIONAL AND BEHAVIOURAL DIFFICULTIES

Carpenter & Apter (1987) remarked that co-operative learning research is not a subject
addressed in any contemporary behavioural disorders text, yet the implications for
teaching behaviourally disordered students are important. Unfortunately, the situation has improved very little in the intervening period as an examination of the current research base for studies that investigate co-operative learning specifically for children with emotional and behavioural difficulties demonstrates. It is virtually non-existent.

The few studies that have examined the influence of co-operative learning strategies on emotionally and behaviourally disturbed students have found mixed results. Salend & Sonnenschein (1989) examined the effectiveness of a co-operative learning strategy on the on-task, academic and co-operative behaviours of three self-contained classes of emotionally disturbed students. They found that, whereas on-task and academic performance levels were increased and were maintained during follow-up, co-operative behaviours were increased but were not maintained at follow-up.

Roberts (1997) described a project that involved 'indirect cognitive methods' that emphasised co-operative activities with two groups of students, aged 7-8 and 10 year olds in a special school for children with emotional and behavioural difficulties. Evaluation 'indicated that the students benefited' from the group work in developing their intrapersonal attitudes and skills.

Disturbing results were found by Bevington & Wishart (1999) who examined the influence of classroom peers on cognitive performance of children with behavioural problems, aged between 9-14 years who were attending two special schools for children with emotional and behavioural difficulties in Scotland. They were allocated to one of three conditions; the child working alone, alongside one peer or co-operatively within a group of six. They found that children with behavioural problems disrupt their own education and also that of their classmates. Although they worked faster and were less disruptive when working in a group than when working in pairs, they made fewer errors when working on their own. Bevington & Wishart, interpreted this as significant, as after
all, accuracy is far more important than speed. A child could be the first to finish a task but the answers may be all wrong.

Bevington & Wishart (1999) in showing the predominantly negative influence of peers on the performance of children with behavioural problems, maintain that the findings from their study do not support the view that such children may learn more effectively apart from classroom peers (a suggestion that runs contrary to the recent trend towards integrating all children with special educational needs into mainstream schools). They also point out that their study only involved a group size of six, and the impact of larger numbers of classmates on the performance of children with emotional and behavioural difficulties awaits further investigation. They do stress, however, that children with behavioural problems disrupted their own education and also that of their classmates whether in large inclusive classes or in small segregated classes. Also, that effective teaching of children with emotional and behavioural problems, regardless of location or size of class will require very careful classroom management and a judicious mix of teaching approaches.

One concern that co-operative learning attempts to address is the deficiencies in interpersonal adjustment that exist in supposedly homogeneous groups in special classes. It is postulated that individualised instruction for cognitive (and affective) learning may not bring this about (Deutsch, 1949; Johnson & Johnson, 1987). Indeed such problems in interpersonal adjustment may even be exacerbated in special classes, therefore a mix of co-operative learning with individualised instruction time may be especially important for behaviourally disordered students (Bryant & Bryant, 1998; Pomplun, 1997).

Therefore, the research evidence for the efficacy of co-operative learning for emotionally and behaviourally disturbed students is not as comprehensive as one assumes exists in the literature to date.
3.15. THE RESEARCH EVIDENCE FOR THE EFFICACY OF CO-OPERATIVE LEARNING PROGRAMMES FOR STUDENTS INCLUDING A SELF-ESTEEM MEASURE

3.15.1. THE RESEARCH EVIDENCE FOR THE EFFICACY OF CO-OPERATIVE LEARNING PROGRAMMES FOR NORMAL STUDENTS INCLUDING A SELF-ESTEEM MEASURE

In early studies of the relationship between self-esteem and co-operative learning, researchers reported that working co-operatively did in general have a positive effect on the self-esteem of the participants. As long ago as the 1960s it was found that a positive correlation exists between children's perceptions of themselves and their school environment. It was suggested that teachers should use more frequent non-competitive learning structures whenever possible to enhance self-esteem. Co-operative learning was one such suggestion. Co-operative games and activities have also been known to be associated with increases in peer acceptance and self-esteem for some time, including both cross ethnic and cross disability interactions (Johnson & Johnson, 1987).

In an early series of studies Ames and her colleges have investigated the effects of competition versus co-operation on self-esteem. Ames remarks that co-operative reward contingencies have been highly touted throughout the literature for promoting higher achievement, higher self-esteem and more positive interpersonal attitudes (Ames, 1981).

Although there is a plethora of studies on the positive benefits of academic learning for students, there is a dearth of studies which have specifically focused on the 'affective' aspects of co-operative learning. This is particularly the case with studies aiming to show the impact of co-operative learning on children's self-esteem.
However, the research evidence for the efficacy of co-operative learning on the self-esteem of normal students in some recent studies have found positive results for children. Noting that self-esteem positively affects student achievement, Hodges & Wolf (1997) implemented and evaluated a programme for increasing self-esteem involving co-operative learning on 5th grade physical education students and 7th grade life science students in the U.S. Post-intervention data suggested an increase in self-esteem. Unfortunately the impact of classroom achievement was by anecdotal teacher records.

Moriarty, Douglas, Punch & Hattie (1995) investigated the extent to which self-efficacy acts as a mediating variable between the learning environment (through co-operative learning) and achievement. They found that when 179 students aged 9 to 10 years were randomly allocated to either co-operative, competitive or individualistic environments twice weekly, with the environments changed after 5 weeks, co-operative environments led to higher self-efficacy, achievement and more appropriate behaviour. Interestingly they also found that the performance of particular tasks under competition appears to be enhanced when students have previously worked co-operatively but considered that this may be difficult to sustain as self-efficacy and behaviour standards decline.

In a study examining the effects of a co-operative learning environment and a Jigsaw classroom environment, that involved both co-operation and interdependence, on academic performance, self-esteem, liking of school, liking of peers, and racial prejudice of 103 children in grades 4-6 in two separate Australian schools, Walker & Crogan (1998) found that Jigsaw produced significant improvements on measures of academic performance, liking of peers, and racial prejudice, but not self-esteem. Perhaps surprisingly, in contrast, the effects of the co-operative condition exacerbated pre-existing intergroup tensions.
Therefore, the research evidence for the efficacy of co-operative learning on self-esteem is not as comprehensive as one assumes. There is a dearth of studies which have specifically focused on the impact of co-operative learning on children's self-esteem.

3.15.2. THE RESEARCH EVIDENCE FOR THE EFFICACY OF CO-OPERATIVE LEARNING PROGRAMMES FOR SPECIAL NEEDS STUDENTS INCLUDING A SELF-ESTEEM MEASURE

Although there are mixed results in the efficacy of co-operative learning with children who have special needs/learning difficulties, reviews have shown positive results for various interventions aimed at self-esteem enhancement for children with special needs. For example, in extensive reviews of the literature noted researchers such as Stanne et al., (1999) and Slavin (1983) found co-operative learning methods were effective in producing high levels of achievement; in facilitating the integration of mainstreamed students in regular classrooms, and in improving students' self-esteem, their liking of their classmates and teacher, and their feelings of internal locus of control.

Early work by Ames & Ames (1978) in a review of studies found that competition promotes contingent self-esteem. Failure in competitive situations was found to cause participants to engage in self-derogation and view themselves as less capable. In another study, Ames (1981) demonstrated that contrasting reward structures have significantly different effects on the cognitive-attributions and affective responses that mediate these behaviours. While winning in a competitive setting produced evidence of self-aggrandisement, losing lowered children's self-perception of their ability and feelings of satisfaction. Her findings also suggest that co-operative group structures may provide an important mechanism for changing these self-defeating thought processes following a poor performance and that the self-concept of ability of the low performer, in particular,
is not jeopardised, and the resulting motivational differences among students are likely to be minimal.

Ames also found (Ames & Felker, 1979) in her previous research that co-operative structures, or at least successful ones, may provide the optimal conditions for self-esteem enhancement. In contrast to the self-defeating behaviours that a competitive loss can cause, the success of a co-operative group may enhance the perceptions of competence and esteem-related effects of a low performing student. The optimal conditions for self-esteem development in children appeared to exist in co-operative structures where the group are successful in their goal accomplishments. Losers were found by Ames to fare significantly better in successful co-operative groups than in competitive encounters. Low performing children judged their ability higher, felt more deserving of reward, and were more satisfied in the successful co-operation group than in the competitive setting. It appears that it is the success of the co-operative group, not merely the team relationship that served to enhance the self-evaluation of the low performer. Her findings also showed that successful and failing groups have markedly different effects on children's evaluative behaviours. The ability, attributions and affective reactions of the low performers were significantly more negative when the group failed than when the group was successful.

Early studies by Johnson & Johnson (1983) compared co-operative, competitive and individualistic learning conditions for 59 fourth-grade students, 12 of whom were diagnosed as having severe learning and behavioural problems. Self-esteem was elevated for both groups under co-operative conditions but there was no statistically significant increase in self-esteem. Still further evidence that co-operation promotes higher levels of self-esteem came from Margolis (1990) in a discussion paper on how to implement co-operative learning in schools. He discussed research by others who found adverse effects on achievement, behaviour and self-esteem of those in the lower tier who are taught in
ability groups. Some studies have found that including students with disabilities in heterogeneous co-operative groups can result in higher academic achievement, self-esteem enhancement, and higher academic attributes for subjects with learning difficulties as compared with mainstreaming or segregated special education classes (Margolis, 1990).

Some researchers have been able to show increases in self-efficacy with children demonstrating 'inappropriate behaviour'. Berry (1996) targeted a 5th grade class in Illinois that had been noted for inappropriate behaviour with 'probable' causes including 'lack of self-esteem'. Using frequent co-operative learning techniques involving conflict resolution strategies and organisational skill development they managed to increase student efficacy and responsibility.

The above studies show that the research evidence for the efficacy of co-operative learning on the self-esteem of students with special needs is generally positive.

3.15.3. THE RESEARCH EVIDENCE FOR THE EFFICACY OF CO-OPERATIVE LEARNING PROGRAMMES FOR CHILDREN WITH EMOTIONAL AND BEHAVIOURAL DIFFICULTIES INCLUDING A SELF-ESTEEM MEASURE

In a recent analysis of the literature on social interdependence - where individuals share common goals and each individual's outcome is affected by the actions of others (Deutsch, 1949) - 800 studies were located and examined by Stanne et al., (1999). Of the 64 studies located for their meta-analysis of the relative impact of co-operative, competitive and individualistic efforts on motor performance they only found 10 studies that included self-esteem as an independent variable, and cited only one that focused on emotionally and behaviourally disturbed children (Fahl, 1970).
As can be seen from the above, unfortunately the situation regarding the research base for studies that examine co-operative learning and its effect on self-esteem for children with emotional and behavioural difficulties has improved very little in the intervening period since Carpenter & Apter (1987) remarked that co-operative learning research is not a subject addressed, for example, in any contemporary behavioural disorders text.

However, in their meta-analysis of 64 studies, Stanne et al., (1999), examining the relative impact of co-operative, competitive and individualistic efforts on motor skills performance, did find that for all comparisons, co-operation resulted in greater interpersonal attraction, social support and self-esteem.

Although the research evidence for the efficacy of co-operative learning on the self-esteem of children with emotional and behavioural difficulties is very sparse, to say the least, the DfE Circular 9/94 blithely extols us to encourage co-operative learning (along with many other unsubstantiated platitudes) with pupils with emotional and behavioural difficulties to enhance their self-esteem. ‘There is a positive association between pupils’ involvement and greater motivation on and feeling of self-worth on their part. Pupils should be encouraged... to work co-operatively with their peers’ (p.13).

However, an examination of the current research base for studies that examine co-operative learning and its effect on self-esteem for children with emotional and behavioural difficulties demonstrates the difficulty of obtaining studies that go beyond simple generalisations of self-concept improvements, with any found not nearly so convincing as one is generally led to believe. If one includes research done in actual classrooms in residential special schools with children with emotional and behavioural difficulties, none could be located.

Statistically significant findings of increases in self-esteem as a direct result of co-operative interventions particularly on children with emotional and behavioural
difficulties are rare. Expressions such as 'promotes,' 'fosters,' 'benefits' are much more prevalent than 'statistically significant' when it comes to describing the impact of benefits of co-operative structures upon the self-esteem of children with emotional and behavioural difficulties. There is a widespread impression, but little evidence in the literature, that self-esteem can be enhanced by co-operative learning for children with emotional and behavioural difficulties, so it is possible to overstate the case in this area.

Furthermore, allied to the above over-optimistic impression of co-operative learning's impact on self-esteem for children with emotional and behavioural difficulties are the findings of Pomplun (1997) that not all studies of self-esteem enhancement by the use of co-operative strategies have produced positive results for all children. For example, Pomplun (1997) in a further study that examined the overall level of performance as well as the amount and nature of participation by students with disabilities in co-operative groups found that the group with behavioural disorders (like the groups containing students with 'mental impairments') did not interact like the other groups; there was less participation and less listening, more speaking when others spoke, more interrupting, and more ignoring of others. These results are a cautionary note regarding the 'mainstreaming' of exceptional children mentioned earlier. Some children, for example, with behavioural disorders, may need more social and group skills learning to enable them to successfully participate in mainstream settings.

Other research has also uncovered various caveats. For example, Margolis (1990) maintains that co-operative learning is 'likely to be far more effective with teachers who see a need for it and want to try it than with those who do not' (p.314). Research has also demonstrated that not all co-operative learning approaches are equally effective for achieving particular goals for all students and teachers, and some strategies may be more effective than others (Margolis, 1990; Walker & Crogan, 1998). Jigsaw, for example, is a method of choice to increase self-esteem. However, it may not always achieve its aims
(Walker & Crogan, 1998). Therefore, according to Margolis (1990) teachers need to systematically monitor the effectiveness of co-operative learning strategies for achieving particular goals with particular students. It can be seen from the above that the research evidence for the efficacy of co-operative learning on the self-esteem of students with emotional and behavioural difficulties is scanty.

3.16. SUMMARY

If one examines the overall research carried out on co-operative learning interventions it can be seen that the research data base is very large for normal children, but decreases both in volume and substance the more one continues through the special needs continuum. The same pattern can be found for research on children's self-esteem. There is a large data base for normal children, but this substantially declines the further one traverses the special needs continuum. Finally, as Pomplun (1997) found, students with emotional and behavioural difficulties in co-operative groups did not interact like other groups; there was less participation and less listening, more speaking when others spoke, more interrupting, and more ignoring of others. There is also much less research evidence of improvements in self-esteem for children with emotional and behavioural difficulties in co-operative learning situations.
3.17. COGNITIVE BEHAVIOUR OVERVIEW

In this section we examine the practice of cognitive behaviour therapy, the third intervention in the study that attempted to enhance the children's self-esteem, and/or other independent variables. Initially, we examine the rationale for using a cognitive behaviour therapy intervention with children. Then, various definitions of cognitive behaviour therapy are given, followed by a brief summary of the history of cognitive behaviour therapy. This is followed by a brief history of verbal self-statements. A theoretical overview of the efficacy of cognitive behaviour therapy in fostering academic and social acceptance is then presented, followed by the theoretical relationship between self-esteem and cognitive behaviour therapy. Following this, we examine the research evidence for and against the efficacy of cognitive behaviour therapy as compared with other therapies. Then, we examine the research evidence for and against the efficacy of cognitive behaviour therapy with normal students, then those with special needs and finally those with emotional and behavioural difficulties. The research evidence for the efficacy of cognitive behaviour therapy for students encompassing a self-esteem measure is examined next. This is followed by the research evidence for and against positive self-referent verbal statements improving self-esteem with normal, special needs/learning disabilities and finally emotionally and behaviourally disturbed students.

3.18. RATIONALE FOR COGNITIVE BEHAVIOUR THERAPY

The link between what people say to themselves and how they feel and behave was established by early cognitive theorists (Meichenbaum, 1977) and supported by research studies attesting to the relationship between self-talk and children's self-esteem, behaviour and affective states. For example Manning (1990) working with elementary
children on verbal and language skills found greater negative self-talk behaviour was related to pupils with lower verbal and language skills and vice versa. Kamann & Wong (1993) again working with elementary children found that learning disabled children used significantly less positive self-talk, and more negative self-talk when recalling past mathematical exercises or tests compared to normal controls. Solley & Payne (1992) taught children positive self-talk strategies to enhance writing and De Hass-Warner (1991) to increase on-task behaviour.

Other researchers have found high test-anxious children experience greater levels of cognitive errors, and higher levels of negative evaluative thoughts, fewer positive evaluations and more off-task thoughts (Prins, Groot & Hanewald, 1997). Similar effects have been found with children who had been diagnosed with anxiety disorders (Kendall, 1993).

Some work has linked aggression to negative thinking (Kendall, 1993). Davison, Vogel & Coffman (1997) using what they term ‘articulated thoughts’ in simulated situations, have found various studies linking anxiety and anger-hostility aggression (ATSS) to cognition. Other researchers maintain that there is considerable evidence that dysfunctional cognitive processing is associated with various forms of psychopathology (Collins, 1999; Rock et al. 1997).

Individuals experiencing problems with cognitive behaviours have been found to have other associated problems. For example, Prins, Groot & Hanewald (1997) in their work on self-statements of test-anxious children found that from a treatment perspective for psychopathology, the need to control negative self-evaluation and off-task thoughts was more important than focusing on coping cognition.

Older studies with emotionally and behaviourally disturbed students have been criticised for concentrating on academics and behaviour control at the expense of the
real underlying emotional issues (Carpenter & Apter, 1987; Grosenick, George & George, 1987; Jones, 1992; Nelson & Rutherford, 1987).

The link between cognitive behaviour and self-esteem has been highlighted (Burnett, 1994a; 1996; Gurney, 1981: 1987; 1987a; 1987b; 1987c; 1988; Freeman, Garety, Fowler, Kuipers, Dunn, Bebbington & Hadley, 1998; Haney & Durlak, 1998; Margerison, 1996) with positive impacts on self-esteem using cognitive behavioural methods found by some researchers (Gurney, 1987; Hains, 1994; Hains & Szyjakowski, 1990; Lochman, 1992; Lockhart & Hay, 1995; Wright, 1996). However, no change in self-esteem using cognitive behavioural methods have been found by other researchers (Deffenbacher et al., 1996; Lamke et al., 1988; Hains, 1992; Valliant et al., 1995).

Furthermore, some researchers maintain that a cognitive conception and a treatment programme for the relationship between self-esteem and cognition is lacking and that different methods of recording self-talk could lead to different numbers of thoughts being expressed and different numbers of positive and negative self-statements (Fennell, 1997). Others have expressed their concern at the lack of empirical studies available on self-instruction training, especially for children with emotional and behavioural difficulties (Diaz & Berk, 1998; Prins, Groot & Hanewald 1997).

Although there is mixed evidence for the efficacy of a relationship between self-talk and self-esteem, there is a perception in the literature that there is indeed a relationship, especially for children who are emotionally and behaviourally disturbed. This is to overstate the agreement in this area, as actual evidence is very tenuous. Notwithstanding the above, the current study attempts to analyse the relationship between a cognitive behavioural intervention (positive self-referent verbal statements) and self-esteem, and other affective variables.
Cognitive behavioural approaches are described as a 'rational amalgam: a purposeful attempt to preserve the positive effects of behavioural therapy yet to incorporate the cognitive activities of the client in order to effect therapeutic change. An integrationist perspective is adopted, which includes consideration of the child's internal and external environment, integrating cognitive, behavioural, affective, social and contextual strategies for change" (Meichenbaum, 1977).

Cognitive behavioural strategies with children and adolescents use enactive, performance based procedures as well as cognitive interventions to produce changes in thinking, feeling and behaviour, placing behaviour under internal control. Cognitive models of psychopathology highlight the impact of maladaptive thinking (e.g. distortion) on maladaptive behaviour and stress interventions that modify self-talk and address faulty cognitive processing. The goal of cognitive interventions is to build a new (or elaborate on an existing) coping template. Cognitive Behaviour Therapy attends to cognitive processes, such as problem solving and the anticipation of the consequences of actions as well as observable behaviour (Kendall, 1993).

Procedures available include self-instructional training, self-recording, cognitive restructuring modelling, self-reinforcement, self-statements of test anxious children, children's self-talk, significant others' positive and negative statements, overt self-talk, reflective thinking and planning, adolescent anxiety and anger and cognitive behavioural social skills programmes (Burnett, 1996; Fennell, 1997; Hains & Szyjakowski, 1990; Lamke, 1988; Lockhart & Hay, 1995; Prins & Hanewald, 1997; Wright, 1996). Also under the aegis of cognitive behaviour therapy can be found Gurney's (1987) research into eliciting positive self-referent verbal statements (PSRVS) by positive reinforcement - the approach adopted for the third intervention in the current study.
3.20. THE HISTORY OF COGNITIVE BEHAVIOUR MODIFICATION

Advances in teaching based upon operant principles helped to undermine the assumptions about educability in the 1960s. A gradual accumulation of evidence for the effectiveness of applied behaviour analysis to severely handicapped individuals had a knock-on effect with mildly handicapped students. This shifted the approaches based on medical models of disability associated with diagnostic prescriptive teaching, to a belief that much more could be accomplished with these children.

Many researchers realised that individuals were indeed 'individual' but tended to ignore these differences as interesting but unnecessary for teaching. Although techniques were employed that gave reliable results, optimal gains were not possible, as individual differences were not fully taken into account. What was always obvious, as far as teachers at the 'chalk face' were concerned, was that 'some students require little more than a verbal hint, while others require the full panoply of highly structured techniques to acquire the same knowledge or display the same level of skilled behaviour' (Gerber, 1988).

In the late 1960s and early 1970s a paradigm shift occurred away from perceptual deficit models towards inefficient or ineffective information processing models of mental retardation and learning disabilities (Gerber, 1988). Meichenbaum & Goodman (1971) formulated a training package to control attention and guide students through a broad array of problem situations, i.e. What is my problem? What is my plan? Am I using my plan? How am I doing? Before Meichenbaum & Goodman (1971) little attention was given to the importance of generalisation effects.

Throughout the 1970s a preoccupation with definitions gave way to attempts to understand cognitive processes. In the late 1970s and 1980s mildly handicapped children were seen as cognitively 'inactive' and as 'lacking in the type of cognitive self-regulation
that is adaptive in the school setting' (Gerber, 1988). Theoretical and empirical reviews of investigations of cognitive strategy training with mentally retarded students occurred leading to research on cognitive and behavioural training methods.

Research findings that learning disabled children lack adequate strategies and approach learning situations as passive, externally controlled recipients meant that interventions in the 1970s attempted to provide children with ways to generate strategies and to participate more actively with the task in hand. Learning began to be investigated in terms of the manner in which information is processed, the strategies that students bring to the lesson, the knowledge and competence of individual students as well as the motivation and affective predispositions.

The importance of cognitive processes in treating children with emotional and behavioural difficulties was realised with the seminal work of Meichenbaum (1977) who emphasised the role of cognitive restructuring. This is based on the theory of cognition which places explicit emphasis on adaptive thinking processes (Beck, 1976) and that emotional disturbance is the result of ‘misinterpretations’ of reality and not the result of life events themselves. Eventually Kendall & Wilcox (1980) were able to demonstrate that practical improvements for impulsive children were possible. Children were trained in a range of actual behaviour and academic problem situations. Six components were used in training, consisting of modelling and practice in using verbal self-instruction. These were (a) problem definition, (b) problem approach, (c) focusing attention (d) problem solution, (e) self-reinforcement and (f) coping with errors. It can be seen that cognitive behavioural research with students identified as mildly handicapped did not begin as a clearly defined concerted effort, but developed from theories and research on behaviourally oriented therapies, evaluation studies of teacher effectiveness, cognitive psychology and social learning research (Gerber, 1988).
3.21. THE HISTORY OF VERBAL SELF-STATEMENTS

It is self-evident that we are not able to directly access our thoughts. Therefore researchers have been forced to develop various methods in order to infer cognitive processes. Artificial experimental situations are devised in order to make inferences about underlying cognitive processes. A classic study by Bransford and Johnson (1973, cited in Davidson, Vogel & Coffman, 1997) in which all participants read the same description of a man getting ready in the morning to leave his house. Some participants are then told he is a stockbroker, others that he is unemployed. In the former condition, participants ‘remember’ afterward that he was reading the financial pages; in the latter, the ‘wants’ section. In fact, the story did not specify what parts of the newspaper he was reading. These findings were used to infer the existence of a schema that distorted the participants’ memories. Alternatives to assess cognition more directly use self-reports in interviews and on questionnaires that require participants to introspect on both current states. Subjects answer questions such as ‘What do you think of that?’ and inquiries on how they retrospectively view their thoughts and feelings over a long period of time by answering such questions as ‘When you are being watched, what thoughts go through your mind?’ (Davidson et al., 1997). These methods of self-report can be seen as precursors to Gurney’s positive self-reference verbal statements.

One mode of cognitive assessment, the think-aloud approach, is viewed as particularly useful in understanding the products as well as the processes of cognition. Its maintained that as think-aloud methods assess cognitions concurrently with their occurrence, they may be better suited to tapping actual thought content than other modes are. In a standard think-aloud method, researchers have participants verbalise cognitions while performing some task, and responses are then recorded for subsequent evaluation with participants verbalizing their thoughts while solving complex problems. Some
researchers had participants think aloud while trying to perceive correctly an ambiguous picture that was slowly being brought into focus.

In the late 1970s it was hoped that thought-sampling approaches would provide useful information on the relationships between thought, emotion, and behaviour when it was found that poor adjustment correlated with endorsements of negative self-statements on self-report inventories. ‘Thought listing’ and the assessment of thoughts as they occurred in naturalistic situations where participants wrote down their thoughts immediately prior to interacting with others showed that those who scored high on a questionnaire of social anxiety generated more negative self-statements than did those with low scores. A similar technique was used to record the assessment of thoughts as they occurred in naturalistic situations by carrying a small random-interval tone generator that cued subjects to record their thoughts or feelings as they were aware of them (Davison et al., 1997).

Other well-known early work on verbal self-statements and self-instruction techniques was developed by Meichenbaum (1977) and Kendall (1984) to treat impulsivity and stress related problems based on work with anxious children and adults who have difficulty controlling anger. Results suggested that altering self-talk had a positive impact on anxiety.

There is some evidence to suggest that aggressive children are deficient in social skills, interpersonal problem solving skills and verbal mediation skills such as perception taking. Remediation strategies have been developed that include stress inoculation, verbal self-instruction, rational-emotive therapy, affective imagery, social problem solving and several combined approaches. For example, Snyder & White (1979) used a variety of techniques including image rehearsal, role play and modelling to re-evaluate conflict situations and use coping self-statements in response to frustration. Other research, looking at anger, aggressive verbalisation and cognitive processing in maritally
violent men found that they articulated significantly more irrational thoughts and cognitive biases than others and also articulated more hostile attributional bias.

Another treatment for aggression that is similar to verbal self-instruction is Block's adaptation of rational-emotive therapy. This intervention is different from verbal self-instruction and stress inoculation in that it focuses on cognitive attributes and appraisals regarding interpersonal situations and substitutes a set of rational self-statements for the presumed misperceptions, whereas the former techniques emphasise maintaining self-control once provoked.

Verbal self-instruction techniques have been used to treat impulsivity and stress related problems based on work with anxious adults and adults who have difficulty controlling anger. They have also been applied to impulsive, angry children. Nevertheless there is a dearth of studies that have studied verbal self-instruction techniques with children who exhibit emotional and behavioural difficulties, and even fewer that have also examined their self-esteem.

3.22. THEORY OF COGNITIVE BEHAVIOUR THERAPY

Meichenbaum (1977) made an important contribution to the development of learning theory when he emphasised the importance of the individual's internal dialogue in providing the foundations of a theory of behaviour change. He observed that there is a wide variety of physiological responses, affective reactions, cognitions and interpersonal interactions that may affect their behaviour at any particular moment. Meichenbaum emphasised the functional value of 'inner speech', or what the individual says to himself.

The verbalisations used whilst engaged in modifying cognitive strategies are based on the work of Luria (1961) and Vygotsky (1978). Vygotsky's theory of child development maintains that as a child grows older his behaviour shifts from being
controlled by the external language of adults and others to being under the influence of his own inner language. Vygotsky theorises that true voluntary behaviour does not exist until this shift from external to internal language occurs. This shift is also thought to be necessary before he can engage in higher cognitive functioning. The importance of children developing inner language is emphasised in Luria's three stages of development. Firstly, adult speech directs and controls the child's behaviour, then the child's overt speech directs his/her own behaviour and finally the child's covert speech directs and controls his/her own behaviour. The theoretical concept of mediation in Vygotsky's cognitive psychology is now accepted.

Gagne (1985) describes learning as a set of internal processes that serve to accommodate stimulations from the individual's environment into particular forms of information which become the basis of long term memory states. The individual learner is seen as actively involved in the process, where thoughts and their structures operate not simply as a means of registering experience, but also potentially influence future thought and behaviour. These and other cognition's mediate experience. This intervening variable of cognition is perhaps the most important feature of what are known as cognitive theories of learning. Individual's thoughts' about their social skills competence are becoming increasingly recognised as more than determinates of behaviour but also as essential dimensions of competence. Researchers have become particularly concerned with an individual’s internal dialogue, essentially what he says to himself when involved in learning.

Cognitive behaviour theory at its core assumes that affective and behavioural responses are mediated through thought processes, both conscious and unconscious, with early cognitive theorists emphasising the link between what people say to themselves and how they feel and behave (Meichenbaum, 1977).
Cognitive and behavioural therapies are based on learning theory (Collins, 1999). Early researchers described cognitive behaviour therapy as part of the broader intervention strategy of behaviour therapy. Wilson & Franks (1982) attempted to conveniently, but arbitrarily, classify behaviour therapy under four basic headings: applied behaviour analysis; neobehaviouristic S-R theory; social learning theory and cognitive behaviour modification.

However, all four approaches share a common core of basic concepts and assumptions: a focus on current rather than past history of behaviour; an emphasis on overt behaviour change as the main criteria by which treatment is to be evaluated; the specification of treatment in objective terms so as to make replication possible; reliance on basic research as a source of hypotheses about treatment and therapeutic techniques and specificity in definition, treatment and measuring target populations.

Although all behavioural procedures have elements of cognition to some extent it is erroneous to equate all behaviour therapy with behaviourism and to assume that behaviourism is a monolithic concept. At least two kinds of behaviourism, methodological behaviourism and metaphysical or radical behaviourism are recognised. Methodological is mediational, often mentalistic and inferential. It frequently employs hypothetico-deductive methodology and group designs. Meta-physical behaviourism by contrast de-emphasises mental states. It is nonmediational, antimentalistic, never inferential and favours induction over hypothesis testing. Single subject designs with repeated measurements are the preferred research design. The majority of practising behaviour therapists are of the methodological school, as to be otherwise and dismiss all cognitive and covert processes would lead to the rejection of virtually all current behaviour therapy procedures (Wilson & Franks, 1982).

Collins (1999) documents a wide range of interventions for people with emotional and behavioural difficulties represented in the literature (these are however mostly with
adults): emotional control skills, relationships and attachment, feeling worthless, powerlessness and depression. In addition, ‘functional analysis’, an integral part of many assessment processes, incorporates a theoretical basis from learning theory. Interventions based on theories of learning include relaxation training, self-control strategies and emotional control skills, exposure procedures and problem solving. These interventions use processes such as modelling, role-play and reinforcement to facilitate the learning of new behaviours and attitudes, as well as working with the person’s feelings about what is currently happening to them and their experiences in the past. Cognitions are also an important part of the process, and need to be worked with simultaneously.

Cognitive behavioural theorists have prompted the notion that individuals perceive and make sense of the world through their cognitive structures, also referred to as schemata (Beck, 1976). The schemata has an influence on what is perceived and how it is processed and understood. According to Kendall (1993) children and adolescents are in the process of developing ways to view their world and cognitive behavioural experiences allow reconceptualisations to build a ‘new’ coping template. The treatment goal is therefore to develop a new or modified cognitive structure in which to view the world.

Whilst procedures such as thought stoppage, desensitisation, token economies, cognitive restructuring, contracting and behavioural rehearsal unique to mainstream behaviour therapy seem to have little in common with each other, virtually anything can be, and often is, classified as behavioural by the addition of the right prefix or suffix; behaviour medicine, behaviour psychopharmacology and cognitive behaviour therapy. The idea of clumping all these together has been questioned (Powers & Franks, 1987). But, according to Kneedler & Meese (1988) although the terminology, techniques and populations used in CBM are quite varied they do share common characteristics. First the subjects are provided with direct instruction usually with modelling in a particular
cognitive strategy, with the objectives specified to the student, why they are important and what techniques can be employed to achieve them. Second, the verbalisations used during the entrenchment of a cognitive strategy are viewed as an essential component based on the work of Luria (1961) and Vygotsky (1978, cited in Karpov, & Haywood, 1998).

Vygotsky’s theory of child development posits that with age the child’s behaviour shifts from being controlled by the external language of adults and others to being under the influence of the child’s own inner language. Vygotsky theorises that true voluntary behaviour does not exist until this shift from external to internal language occurs. This shift is also thought to be necessary before the child can engage in higher cognitive functioning. Luria’s three stages of development also stress the importance of children developing inner language: adult speech directs and controls the child’s behaviour, the child’s overt speech directs his/her own behaviour and the child’s covert speech directs and controls his/her own behaviour. The central concept in Vygotsky’s cognitive psychology is mediation and is now firmly established in the theoretical arena.

Vygotsky’s ideas on the development of self-regulation in children can, according to Karpov & Haywood (1998) be summarised accordingly:

- the child’s behaviour is regulated by the use of external speech
- the child regulates someone else’s behaviour by the use of external speech and regulates his/her own behaviour by using egocentric speech
- the child regulates his/her own behaviour by using inner speech.

Cognitive training does not employ verbalisations as simple parroting exercises, but as crucial tools that enable the child to inhibit impulses, select correct alternatives and guide behaviour towards accurate, appropriate performance. Finally the child is seen as an active participant in the process.
It has been suggested that negative self-statements, as opposed to positive self-statements, are predictive of maladjustment. Kendall (1984) referred to this as 'the power of non-negative thinking' with the actual number of positive and negative self-talk statements not being as important as the optimal balance of these statements. This is supported by Prins & Hanewald's (1997) work. Their States of Mind (SOM) model supported the notion that controlling negative self-evaluation thoughts, rather than focusing on coping cognition, was more effective.

According to (Burnett, 1996) confusion exists in the literature as to what terminology should be used to describe the self-talk phenomena and how it should be defined. Various synonymous terms used include self-statements, inner speech, private speech, inner dialogue, internal dialogue, positive self-referent verbal statements, verbal self-regulation, speech to self, self-directed speech, destructive dialogue, self-cognition, private self-talk, adaptive self-talk, positive self-talk and negative self-talk and dysfunction occurs when the rates of positive to negative self-statements shift.

Cognitive behaviour methodology is therefore designed to recognise and modify the internal directions given to oneself when confronted with difficult situations. This has parallels with Gurney's work, discussed in more detail below. However, behaviour therapy, or behaviour modification, does not constitute a single or unified concept, theory or practice. Its roots can be traced back to many schools of thought, philosophical systems and countries (Powers & Franks, 1987).

3.23. THE THEORETICAL EVIDENCE FOR THE EFFICACY OF COGNITIVE BEHAVIOUR THERAPY IMPROVING SELF-ESTEEM

Marston (1965) concluded that a statement about oneself is a good indicator of an individual's self-esteem and Homme, De Baca, Cottingham & Homme (1968) defined
self-concept as the aggregate of sentences a person says to himself. Individuals said to be low in self-concept characteristically emit a low frequency of positive self-statements. In 1971, Miron hypothesised that children's self-esteem would improve as a consequence of their teacher using behaviour modification techniques. In 1972 O'Leary & O'Leary postulated that behaviour modification programmes 'may have the additional benefit of having the child think better of himself' (p.15). Felker & Thomas (1971) confirmed the association by examining self-esteem scores and finding that they correlated positively with the frequency of positive self-referent verbal statements (PSRVS) made by the students. Therefore, it can be seen that by the late 1970s, several thought-sampling approaches began to be pursued, attempting to yield useful data on the relationship between thought, emotion and behaviour and that poor adjustment correlated with endorsements of negative self-statements on self-esteem inventories.

The work of Krop, Calhoon & Verrier (1971) and Rose (1978) brought the field in line with the cognitive behaviour principles of Bandura and Meichenbaum. Significant changes in self-esteem in these investigations were brought about by changes in cognitively oriented behaviour modification programmes (Gurney, 1987).

Bandura's social learning theory postulates three separate but interacting regulatory systems to control behaviour. These are external stimulus events, external reinforcement, and cognitive mediational processes. This determines which environmental influences are given due attention and how they are perceived and interpreted by the individual. Most important, interactions between individual and environment are reciprocal. Social learning theory is based on a reciprocal determinism model of causal processes in human functioning. The emphasis in social learning theory is on the individual as the agent of change with self-control and self-direction integral aspects of social learning theory.

Performance feedback is also important, enabling adequate internal mediating processes to enhance self-concept, with self-concept linked to a network of relationships
to achievement and self-attributions. It also appears important to target specific aspects of self-concept rather than global self-esteem (Craven, Marsh & Debus, 1991). In relation to the current study it may be a little too optimistic to expect enhancement in global self-esteem after the cognitive behavioural intervention. Perhaps we should be looking in more detail for improvements in the domain specific area of social self-esteem, and also locus of control.

Some researchers believe that not enough work has been done on either the frequently encountered problem of alleviating low self-esteem. According to Fennell (1997), although low self-esteem is common in clinical populations, a cognitive conceptualisation of the problem and an integrated treatment programme deriving from that conceptualisation is lacking. She proposes a cognitive model for low self-esteem, deriving from Beck's model of emotional disorder, integrating ideas and methods from cognitive therapy and more recent work on schemas or core beliefs.

3.24. THE EVIDENCE FOR EFFICACY OF COGNITIVE BEHAVIOUR PROGRAMMES COMPARED WITH OTHER THERAPIES

Behavioural or cognitive-behavioural strategies, as well as pharmacological treatments, are the strategies that have been most extensively investigated with children diagnosed as attention deficit hyperactive disorder (ADD). Cognitive behavioural therapies (CB) have been compared in combination with, or in contrast to, drug therapies. Some findings have shown that only the medication condition of methylphenidate, with medication continuing through post-testing, produce significant improvements in sustained attention, cognitive impulsivity, academic achievement and teacher and parent behaviour rating with children with ADD. When medication was discontinued before post-testing, the medication effects dissipated rapidly; and post-test measures showed no
significant main treatment effects or interactions. In none of the series of studies did the combination of medication and cognitive therapy produce results beyond medication alone (Borden, Brown, Wynne & Schleser, 1987). They also examined the ability of children to benefit from cognitive therapy in the light of the research that links the matching of cognitive abilities and the requirements of training tasks. No differences were found across development groups apart from cognitive impulsivity in favour of the non-conserving (Piagetian) group. They remarked that CB had not consistently demonstrated positive effects of a magnitude that would recommend its wider use, especially considering the relatively high staff investment required for implementation. However other clinicians advocate additional study of cognitive behavioural therapies, especially as components of comprehensive intervention programmes. Hall & Kataria (1992), for example, investigated the relative effectiveness of behaviour modification and cognitive training implemented with and without medication. None of the treatments significantly improved sustained attention; the combination of cognitive training and medication was the only intervention that significantly improved subjects' abilities to delay impulsive responding.

Bloomquist, August & Ostrander (1991) compared the short-term efficacy of multicomponent cognitive behaviour therapy, teacher-only cognitive therapy and no treatment. On post-treatment the only benefits was the reduction of off-task/disruptive behaviour for the multi-component group. This research could be seen as an indication of the relatively poor efficacy of multi-treatment groups.

Thackwray, Smith, Bodfish & Meyers (1993) directly compared behavioural and cognitive-behavioural interventions for bulimia nervosa. They found, however, that although the behavioural therapy and the cognitive behavioural therapy groups both demonstrated maintenance the cognitive behavioural group evidenced a significantly greater effect. However, due to the relative paucity of multicomponent cognitive
behaviour therapy studies available, it is not possible to make any valid assumptions until more data and more studies have been conducted.

3.25. RESEARCH EVIDENCE FOR EFFICACY OF COGNITIVE BEHAVIOUR THERAPY PROGRAMMES FOR STUDENTS

3.25.1. RESEARCH EVIDENCE FOR EFFICACY OF COGNITIVE BEHAVIOUR THERAPY PROGRAMMES FOR NORMAL STUDENTS

Lamke et al. (1988) used a cognitive behavioural therapy modification programme with eighteen ninth-graders to change adolescents' self-statements and found that participants had significant increases in self-statements immediately after training and three months later. Hains & Szyjakowski (1990) examined a cognitive intervention to help adolescents cope with stress and negative emotional arousal. Although small groups were involved, the results showed significant reductions in anxiety and anger and increases in the number of reported positive cognitions by training group members.

Burnett (1994a) investigated the impact of cognitive behavioural therapy and rational emotive therapy with 105 students with a mean age of 9.8 in Australia. He found that cognitive behavioural therapy led to decreases in negative self-talk whereas rational emotive therapy did not. However cognitive behavioural therapy did not lead to a decrease in 'dependence irrational belief' whereas rational emotive therapy did. Hains (1994), in an examination of a school-based cognitive stress management intervention programme with secondary school students, found significant improvements on a variety of emotional arousal measures with cognitive restructuring resulting in improvements in measures of trait anxiety, depression and trait anger. Burnett (1996), in examining the relationships between self-talk and significant others’ positive and negative statements
on 675 elementary children in three middle schools in Australia, found that children who perceive that significant others talk positively to them appeared to have higher positive self-talk and lower negative self-talk than children who reported that significant adults say negative things to them.

Reviews for the efficacy of cognitive-behavioural therapy have had mixed results. Abikoff (1987; 1991) felt that the weight of evidence was against cognitive behavioural therapy, as did Fiore, Becker & Nero (1993) who examined 137 empirically-based articles. They reviewed the evidence for behaviour management, academic instruction, home/school collaboration and comprehensive programming, noting that investigators have collected relatively little data on interventions in the classrooms - only 21 out of 137. (This has been found with studies of social skills and co-operative learning interventions as discussed earlier.) Fennell (1997) expressed concern at the lack of integrated theoretical perspectives in cognitive behaviour therapy as mentioned earlier. Prins, Groot & Hanewald (1997) and Chamberlain & Haaga (1997) have also expressed concern at the vastly different modes of cognitive assessment without adequate attention to validity issues with measures of the same construct often not correlating highly. Other researchers (Burnett, 1996; Davison et al., 1997; Kendall, 1993) have reported favourable outcomes for cognitive behavioural therapies.

3.25.2. RESEARCH EVIDENCE FOR EFFICACY OF COGNITIVE BEHAVIOUR THERAPY PROGRAMMES FOR SPECIAL NEEDS STUDENTS

Cognitive behavioural approaches although most concerned with children with attention deficit hyperactivity disorder have been implemented with various special needs groups and used in controlling anger, attention deficit hyperactivity disorder, anxiety disorders, medical and dental stress, depression, and impulsivity, chronic illness and learning
disabilities. However, as cognitive factors in child psychopathology and childhood anxiety are, in particular, presumed to be linked, empirical studies on various methods of cognitive assessment with children have received little empirical attention (Prins & Hanewald, 1997).

Fiore, Becker & Nero (1993) examined the efficacy of cognitive behavioural interventions for children with ADHD and found inconsistent results such as generalisation; subjects drawn almost exclusively from elementary-aged children, samples not being homogenous, children exhibiting a great diversity of learning and behaviour problems, categories being grouped together artificially and development measures varying greatly. Of particular concern, again, were the findings that researchers tested few interventions in school settings and even fewer in regular classrooms.

In an attempt to prevent aggression in 'inner-city children' Eargle, Guerra & Tolan (1994) described a two-year small-group training programme for children with aggressive behaviour who were at risk of serious antisocial behaviour. They recommended that interventions concentrate on five areas of social cognition, self-understanding, self and others, normative beliefs, sense of control and social problem-solving.

Kamann & Wong (1993) studied the self-talk of 10 learning disabled and 10 normally achieving children in grades 4-7 and found the learning disabled children used significantly less positive talk (20.5% compared 45.5%) and more negative self-talk (47.9% compared 18.3%) when compared with controls, suggesting self-talk may be related to academic achievement.

Lockhart & Hay (1995) investigated the effectiveness of a part-time challenge-based intervention programme for 18 at-risk adolescent girls, with a mean age of 13.8, using a cognitive framework that encouraged students' use of reflection, verbalisation, planning skills and application of effort. The findings supported the use of overt verbalisation in
learning to improve self-control and the use of reflective thinking and planning to enhance students' self-confidence and achievement motivation.

Valliant, Jensen & Raven-Brook (1995) examined the effectiveness of cognitive behaviour therapy and social skills training on 39 subjects, aged 16-28; 24 were in open custody, 5 were on probation and 10 were enrolled in secondary school in Canada. Results from a battery of tests indicated that mean scores pre-and post-treatment for the three groups did not differ.

Reviews of multimodal interventions of cognitive behaviour therapy with children with attention deficit hyperactivity disorder have also been mixed. Potential benefits of multimodal interventions have been found by Hinshaw & Melnick (1992) whereas Bloomquist, August & Ostrander (1991) found contradictions to the evidence that the findings from multimodal studies suggest that treatments may have additive or interactive effects when using resources both within and without school.

3.25.3. RESEARCH EVIDENCE FOR EFFICACY OF COGNITIVE BEHAVIOUR THERAPY PROGRAMMES FOR CHILDREN WITH EMOTIONAL AND BEHAVIOURAL DIFFICULTIES

A central issue according to Kendall (1993) facing clinical child psychology is how best to intervene to reduce or remediate the cognitive, behavioural and emotional difficulties that are associated with present psychological distress and later psychopathology.

However, classroom interventions designed to modify cognitive processes have produced mixed results (Versi, 1995). Erroneous simplistic assumptions are sometimes made by researchers who assume that groups of emotional and behaviourally disturbed students are a homogeneous population, whereas in reality characteristics of children with emotional and behavioural difficulties may range from social isolation and major
depression to serious discipline problems, hyperactivity, inability to delay gratification and juvenile court involvement (Oden & Asher, 1977; Rock et al., 1997). According to Versi (1995) such heterogeneity may be responsible for the lack of common findings from one sample to another.

Roberts (1997) working with children with emotional and behavioural difficulties describes a project using ‘indirect’ cognitive methods and creative and expressive activities related to particular themes. Six to ten one-hour sessions were held with two groups of students, seven year 8 pupils and ten year 6/7 pupils, with their teachers at a special school. Results of staff and student evaluation of the sessions ‘indicated’ that the students ‘benefited’ from the intervention.

Wright (1996) describes a cognitive behavioural social skills programme designed for preadolescent, conduct disordered boys in residential treatment. The boys were from abusive/chaotic environments, and often had additional diagnoses of attention deficit hyperactive disorder and/or learning disability. She found at programme evaluation that consistent improvement in social skill competency and self-control was apparent and that outcome data on the 30 boys, one year after discharge, suggested that the programme had potential long-term benefits.

Lochman (1992) examined the longer-term preventative effects of school-based cognitive behavioural intervention with ‘aggressive’ and ‘disruptive’ boys. Three years after intervention, boys who had received anger and coping programme had lower rates of drug and alcohol involvement and social problem-solving compared with a comparison group of equally aggressive untreated boys.

Unfortunately, in the Cognitive Behaviour Therapy literature, only a very small number of research studies can be found, with the most frequently investigated procedures involving either self-instructional training or self-monitoring. Very little
indeed can be found on children with emotional and behavioural difficulties using what Gurney termed Positive Self-Referent Verbalisations (PSRVS).

3.26. RESEARCH EVIDENCE FOR THE EFFICACY OF COGNITIVE BEHAVIOUR THERAPY PROGRAMMES FOR STUDENTS INCLUDING A SELF-ESTEEM MEASURE

Kendall & Brasswell (1984) noted that no study at that time had examined the effects of cognitive behavioural procedures on children's self-concept and academic achievements. They randomly assigning 27 ‘non-self-controlled problem children to either a cognitive-behavioural, behavioural or attention-control condition. The behavioural treatment involved modelling and contingencies and the cognitive-behavioural treatment included self-instruction training. Pre-treatment, post-treatment and a 10 week follow-up assessment of self-concept showed significant differences only for the cognitive-behavioural group. However, after one year no significant differences were found between the cognitive behavioural group and the behavioural group.

Research on post-treatment effects of full cognitive-behavioural therapy with depressed children is rare. One of a very few studies to do so is Reynolds & Coat's (1986) work. They randomly assigned 30 moderately depressed adolescents to either a cognitive-behavioural, relaxation or wait-list control group. Significant reductions for the cognitive-behavioural group in depression symptoms as measured by a self-report and clinical report were found to be maintained at a five-week follow-up along with improvements in academic self-concept.

The effectiveness of using cognitive behaviour therapy to improve self-esteem has been found to be equivocal even amongst the same researchers. For example three studies by Hains have had mixed results, with one of them using hypothetical situations.
Hains & Szyjakowski (1990) in utilising a cognitive stress reduction intervention programme for adolescents coping with stress and negative emotional arousal in hypothetical situations found significant reductions in level of anxiety and anger and improvements in self-esteem. Hains (1992) again examined the effect of stress inoculation for adolescents in a High School setting and found no changes on depression and self-esteem, finding similar patterns at a three-month follow-up. Other work by Hains (1994) examined the effectiveness of a school-based, cognitive stress management intervention programme on secondary students with adolescents reporting 'high and low levels of emotional arousal' and found significant improvements on a variety of 'emotional arousal measures'. Cognitive restructuring resulted in significant improvements on self-report measures of trait anxiety and self-esteem.

Lockman (1992) used a school-based intervention with boys referred by high school teachers as highly aggressive and disruptive to an anger coping programme and three years later found that they had lower rates of drug and alcohol involvement and higher levels of self-esteem than did a matched comparison group.

Deffenbacher, Lynch, Oetting & Kemper (1996) examined 'high anger' 6-8\textsuperscript{th} graders in three groups: cognitive behavioural therapy (cognitive-relaxation coping skills), social skills training and no treatment groups. They found that, compared to the control group, both cognitive behavioural therapy and social skills were equally effective in reducing trait, general and personal-situational anger and outward negative anger expression, as well as increasing controlled anger expression. On other variables cognitive behavioural therapy showed some superiority, for example, lowered depression, shyness, general deviance and anxiety, but found no differences on self-esteem.

Lockhart & Hay (1995) however, did find that specific aspects of self-esteem were enhanced as a consequence of a cognitive strategy using reflective thinking in a challenge-based programme. He investigated 18 at-risk adolescent girls, with a mean age
of 13.8, and suggested that these findings support the use of overt verbalisation in learning to enhance students' self-confidence and achievement motivation.

Findings in this area have produced different results, depending upon the methods of comparison and what is compared with what, such as behavioural or cognitive-behavioural strategies, as well as pharmacological treatments. Of more concern to the writer is that, with very few exceptions, studies examining the effects of cognitive behavioural procedures on children's self-concept and affective domains is a very underdeveloped area of research even today.

3.27. RESEARCH EVIDENCE FOR THE EFFICACY OF POSITIVE SELF-REFERENT VERBAL STATEMENTS PROGRAMMES FOR STUDENTS INCLUDING A SELF-ESTEEM MEASURE

3.27.1. RESEARCH EVIDENCE FOR THE EFFICACY OF POSITIVE SELF-REFERENT VERBAL STATEMENTS FOR NORMAL STUDENTS INCLUDING A SELF-ESTEEM MEASURE

Positive self-referent verbal statements for children have been used for some time. For example, Krop, Calhoon & Verrier (1971) split the 36 patients in a South Florida State Hospital into two groups plus a control group. One group was covertly reinforced to elicit positive self-referent verbal statements whereas another group was overtly reinforced. The subjects in the covert condition were asked to imagine a pleasant scene after emitting positive responses, whilst those in the overt condition received a token reward and consumable rewards. Post-test analysis of the results showed a significant gain only for the covert group over the control group. Manning (1990) investigated the positive, neutral and negative self-talk of 94 children in grades 2-5, and found that
students with lower verbal and language skills had higher negative self-talk and vice versa. The results give support to the notion that behaviour problem children may speak negatively and not positively to themselves (Burnett, 1996).

Hauserman, Miller & Bond (1976), Danzig, (1977) Rose (1978) and Lane & Muller (1977) all found statistically significant increases in self-esteem associated with positive self-referent verbal statements. In another study, Aja (1972) found a significant improvement in self-esteem for the experimental group as compared with the control when eighteen primary school children were reinforced by tokens to increase the frequency of positive self-referent verbal statements.

Other investigators have found an association between high self-esteem and the frequency of positive self-referent verbal statements. Although Felker, Stanwyck & Kay (1973) found (amazing) improvements in self-esteem over a twelve-week period on pupils at 8 inner city schools with the majority of the students being black, there was no significant difference between the experimental and control group. Of the five experimental 'principles' the teachers were asked to employ with the children, such as setting reasonable goals, one principle was to get children to praise themselves. Hauserman, Miller & Bond (1976) in a study involving 40 elementary children, used prompting, by a teacher, of a positive self-statement from the child following a successful classroom experience. The statement was immediately followed by a positive social reinforcer (hug, wink, pat on the back etc.). Eight promptings per day were made. If a child was unable to give a positive self-statement, the adult would model a statement and the child was asked to repeat the statement. After the 40-day treatment period the experimental group's analysis of post-test scores of self-esteem revealed a highly significant difference. The validity of self-esteem enhancement in this study is somewhat undermined by the use of the Bolea Pictorial Self-Concept Scale, as such scales are not frequently used by researchers, therefore making comparisons difficult.
Lane & Muller (1977) had 60 fifth grade students over 4 weeks attempt to increase the frequency of written self-referent statements in a three group experimental design. Post-test analysis of the main treatment group showed a significant increase in both self-referent statements and post-test gains for self-esteem. Lamke et al. (1988) in an attempt to modify eighteen 9th graders cognitive self-statements managed to increase their positive self-statements immediately after training and maintain them three months later but were unable to affect differences in their self-esteem.

One study, again using elementary children, has explicitly examined the relationship between self-esteem and self-talk. Burnett (1994a) used an interview format to measure positive and negative self-talk responses to nine hypothetical situations using 104, grade 4-7 children, and found small, but significant correlation coefficients indicating that the generation of positive self-talk was positively related to self-esteem and negatively related to depression. He also found, interestingly, that negative self-talk was not related to self-esteem or depression, suggesting that the influence of positive self-talk on self-esteem and depression is more powerful than negative self-talk. (The current study focuses on eliciting positive statements, in line with Gurney's work and that of Burnett's.)

3.27.2. RESEARCH EVIDENCE FOR THE EFFICACY OF POSITIVE SELF-REFERENT VERBAL STATEMENTS FOR CHILDREN WITH SPECIAL NEEDS INCLUDING A SELF-ESTEEM MEASURE

Studies in the literature have examined self-talk strategies with children with learning difficulties, but very few have related self-talk to self-esteem.

Early studies, such as, for example, Parker (1964) used a contingency management procedure on 60 elementary school children and found significant main effects for total self-esteem and school-related self-esteem. The subjects were an opportunity sample of
‘disruptive and inattentive’ pupils who had been placed in resource classes and were
given daily credit cards for three appropriate classroom behaviours over a period of 8
weeks. Philips (1975) used contingent praise to increase the frequency of positive self-
statements in 30 ‘disadvantaged’ elementary children and found a statistically significant
effect for self-esteem. Douglas, Parry, Marton & Garson (1976) trained boys with
‘hyperactivity’ to use self-verbalisations and self-reinforcement during cognitive tasks,
academic problems and social situations, with the training group showing significantly
greater improvement on several post-test and follow-up measures, but not on a teacher
rating scale. Danzig (1977) in a study involving 61 educable mentally retarded pupils,
trained 16 special education teachers to reinforce pupils’ positive self-referent verbal
statements. Differences between the groups on both the gain in self-concept scores and
the frequency of positive self-referent verbal statements were remarkably significant
(p<0.005 & 0.001, respectively). Rose (1978) also found statistically significant
differences between instructional and control groups on both self-esteem and
behavioural (overt) self-esteem. The middle-school children with ‘learning difficulties’
were split into two groups, with the self-instructional group discussing and practising
substituting positive self-referent verbal statements in imagined school situations that
usually generated negative statements.

Maag & Behreus (1989b) found that decreased self-concept, as represented by
negative cognitive self-statements, appeared to be significantly correlated with severe
depression in subjects with learning difficulties and emotional and behavioural
difficulties.

Kamann & Wong (1993) studied the self-talk of 10 learning disabled and 10
normally achieving children in grades 4-7 and found the learning disabled children used
significantly less positive talk and more negative self-talk when compared with controls,
suggesting self-talk may be related to academic achievement.
However, Valliant, Jensen & Raven-Brook (1995) examined the effectiveness of cognitive behavioural therapy and social skills training on 39 subjects aged 16-18; 24 were in custody, 5 were on probation and 10 were enrolled in secondary schools in Canada. They found that the mean scores pre-and post-test results of intelligence, self-perception and hostility and self-esteem as measured by Coopersmith's self-esteem inventory after cognitive behaviour therapy and social skills training were not significantly different for the three groups.

3.27.3. RESEARCH EVIDENCE FOR THE EFFICACY OF POSITIVE SELF-REFERENT VERBAL STATEMENTS FOR CHILDREN WITH EMOTIONAL AND BEHAVIOURAL DIFFICULTIES INCLUDING A SELF-ESTEEM MEASURE

In 1981 Gurney also found that a substantial increase in positive self-referent verbal statements was associated with a significant increase in self-esteem in both verbal self-report and behaviour. Unfortunately the control group also improved in verbal self-esteem over the same period. He worked with 'maladjusted' boys aged 10-12 over a six-week period. Gurney's explanation for the improved self-esteem in the control group was they had experienced the same extraction procedures.

In 1987 Gurney reported that he could find no work published in the UK using behaviour modification to enhance self-esteem in school children and none that had been carried out with maladjusted children (p. 87). Unfortunately, the situation is very much the same even today.

Gurney (1987) in pursuit of the claim that there may be a relationship between behaviour modification techniques and self-esteem, attempted to increase the frequency of positive self-referent verbal statements and examine the effect upon both overt and reported self-esteem in 14 'maladjusted' children of 10-12 years. His general hypothesis
was that a substantial and sustained increase in the production of positive self-referent verbal statements over a period of 6 weeks would enhance global self-esteem as reflected in both behaviour and self-esteem report. He also hoped to find increases in specific self-esteem in relation to attainments and basic attainments in their own right.

Gurney found at post-test analysis a significant difference in overt self-esteem as recorded by teachers, but failed to find any differences in the other dependent variables of global and specific self-esteem, as measured by Coopersmith's Self-esteem Inventory. He also failed to find any differences between attainments, manifest anxiety and locus of control.

Fiore, Becker & Nero (1993) noted that the research on behaviour management of children with ADD has focused on on-task behaviour, task completion, compliance, impulse control as well as social skills while reducing hyperactivity, off-task behaviour, disruptive behaviour and aggression.

Wright (1996) describes a cognitive behavioural social skills training programme designed for preadolescent, conduct-disordered boys in residential treatment (Wright noted that these boys are usually from abusive/chaotic backgrounds and often have diagnoses of ADHD and/or learning disability). Her cognitive behavioural social skills training programme involved three major goals of improving social skill competency, enhancing self-esteem and increasing self-control. She found consistent improvement in social skill competency, and significant positive changes in self-esteem and self-control.
3.28. SUMMARY

Although there is very little research evidence in the literature there has been an interest in cognitive behaviour therapy and its relationship to self-esteem for some time, albeit, with a very small number of studies published. The few early studies were generally positive, but most were with elementary children and lacked validity and adequate controls (Gurney, 1987). More recent studies that exist in this area show the efficacy of programme effectiveness to be mixed. This is particularly the case for studies examining the relationship between self-esteem and emotional and behavioural difficulties, especially with interventions in the classroom. Even rarer still are recent studies examining the self-esteem of emotionally and behaviourally disturbed children of middle-school age in residential special school classrooms, using cognitive behaviour methods, especially positive self-referent verbal statements.

3.29. SUMMARY OF FINDINGS ON THE THREE INTERVENTIONS

This study has highlighted research in the literature that has demonstrated a positive relationship between self-esteem, social skills, co-operative learning and positive self-verbal referents, but none without contention. Although the overall findings of these studies do not reveal any clear pattern regarding the relationship between these variables, a common theme is one of a diversity of levels and types of interaction. It has also become increasingly apparent that many assumptions in the literature have been found to have only a tenuous bearing to reality.

Even though it is suggested in the literature that there are functionally direct relationships between self-esteem, social skills, co-operative learning, positive self-verbal referents and other affective variables, this may be a somewhat erroneous picture
for children with emotional and behavioural difficulties. For example, unfortunately, virtually none of the studies cited involved children in residential special schools. Therefore, due to lack of suitable studies, we have only been able to establish tenuous links by examining studies that are somewhat similar in population and treatment, but not precisely so.

Some of the studies discussed in this section had particular methodological weaknesses, such as small subject groups that are inadequately sampled. Subjects are therefore unlikely to be representative of the general population. Another weakness is the number of studies that are of elementary/primary children and therefore constitute very young populations. These populations may produce results unique to themselves and furthermore, the results may not be easily transferable to the population of young adolescents in the current study. Other problems are the lack of suitably differentiated and accurately labelled populations, labelled, for example, as 'high risk' populations. Another weakness is the research designs employed in some of the studies. For example, some did not have a control group, let alone a matched control group. It is therefore not possible to say whether the reported effects are due to the factors suggested or to other confounding variables.

Many of the studies reported here were carried out in North America, and whilst this does not in any way debar them, it is possible that a cultural bias and other factors such as operational definitions of children's 'disabilities' and 'labelling' may limit their generalisation to populations in this country. Many of the studies reviewed report that self-esteem was 'improved' etc., and are much less forthcoming in reporting statistically significant results. As well as operational definitions of children with emotional and behavioural difficulties and comorbidity with other learning difficulties, other problems have been encountered. For example, further confusion can occur with operational definition problems of the 'self,' social skills, co-operative learning and cognitive
behavioural terms for the cognitive behavioural intervention of self-talk. Lack of theoretical models that tie into practical applications have also been cited by many researchers as a particular problem in this area of affective research.

Accordingly, in the current study, it was decided to investigate the postulated relationships between self-esteem, social skills, co-operative learning, positive self-verbal referents and other affective variables with an open mind, in the light of the very scanty evidence found in the literature.
CHAPTER 4

THE VALUE OF MULTIPLE MEASUREMENTS WITH CHILDREN WHO HAVE EMOTIONAL AND BEHAVIOURAL DIFFICULTIES

4.0. OVERVIEW

It is generally recognised that children with emotional and behavioural difficulties are not adequately described by a single set of characteristics (Rock et al., 1997). In the light of the above, this chapter examines the value of multiple measurements of the impact of three separate interventions on children with emotional and behavioural difficulties, contending that it is unwise to employ a single intervention, or a single set of assessment measures - we need a variety.

Assessment is therefore discussed in the light of children having emotional and behavioural difficulties. It is contended that every instrument/measure is imperfect to some degree and we may need multiple measures to assess any positive effects. This chapter examines the reasons why the writer decided to utilise various measures when looking for change before and after the three interventions.

Initially, we consider the value of multifaceted programmes of intervention. We then examine in more detail the problems encountered in the measurement of the affective states of children with emotional and behavioural difficulties due to unsatisfactory descriptions of their multiple characteristics.
The next subsection considers the value of multiple measures in comparing research studies in response to the overlap of classifications and definitions of students with special needs.

We then, in turn, examine the affective measures used in the study. Initially, we examine the utility of rating scales in general, followed by the value of using a self-esteem measure of affective performance which is discussed by examining the theoretical problems associated with the measurement of self-esteem. We then examine - as suggested by some theoreticians and researchers - whether children with emotional and behavioural difficulties actually do have low self-esteem, or whether they have what is termed 'positive illusory bias or false self-behaviour' in self-esteem reporting and assessment. Problems encountered when trying to access the false self are then discussed.

The history of 'positive illusory bias or false self-behaviour' is then examined. This is followed by a brief examination of social comparison theory that explains self-esteem in terms of comparison with one's peer group. How the value of self-concept scales due to age or development delay and teacher feedback can cause problems in their use and interpretation are then considered. We then examine the particular problems of assessment when measuring cognitive behaviour.

4.1. Rationale

Most researchers and practitioners would admit that there is no single set of characteristics that can be said to be a satisfactory description of a child with emotional and behavioural difficulties (Daniels et al., 1999). Indeed the category of emotional and behavioural difficulties is seen as an 'umbrella term' for a wide variety of problems and difficulties (Cooper, 1996b). We therefore need a variety of ways to measure progress.
The particular value of a measure of self-esteem is that the measure is able to assess changes in the affective whole self as well as in many different individual domains, such as global, general, academic, social and parental self-esteem. However, self-esteem measurement is not a complete measure of the 'self' and therefore we would be prudent to assess affective characteristics using other complementary measures. This study, therefore, includes behavioural observations on a weekly half-hour 'free time' session, a measure of locus of control, a peer preference scale to assess with whom the children most like to work and play, a rating form to measure overt self-esteem, and a behavioural questionnaire to measure behaviour. Each one of these measures have advantages and, of course, each one also has drawbacks. By including a wide range of measures the author hopes to obtain a fuller picture of the effects of the three interventions on children with emotional and behavioural difficulties.

4.2. THE VALUE OF MULTIFACETED PROGRAMMES OF INTERVENTION

Because of the complex characteristic of children with emotional and behavioural difficulties and their associated learning difficulties (DfE circular 9/94; DfEE, 1998) there is a need for multifaceted programmes of intervention (Rock et al., 1997).

Studies on the general state of programmes for educationally and emotionally disturbed children suggest serious limitations in programme effectiveness, appropriateness and the variety of methods employed (Carpenter & Apter, 1987; Nelson & Rutherford, 1987).

Of particular concern for some time is the appropriateness of many investigations, with Kauffman, Lloyd, Cook Cullinhan, Epstein, Forness, Hallahan, Nelson, Polsgrove, Sabornie, Strain & Walker (1991) stating 'In educational programmes for students with emotional and behavioural disorders, there has been a long-standing practice of
excessive focus on academics and punitative behaviour control at the expense of
effective programming for the primary problems for which students were referred’
(p.22).

Problems exist not only in achievement and intelligence but also in a variety of
information processing operations related to efficient acquisition, retention and problem­solving. In addition to these cognitive difficulties, children with emotional and
behavioural difficulties also display problems in motivation, social skills and self­
efficacy. Effective programmes need to take into account these multiple problems, rather
than focus on achievement only (Rock, et al., 1997).

Current requirements of the National Curriculum apply to all pupils, making
targeting the effective aspects of a child's education difficult to justify under the present
climate. Nevertheless, some recognition and concessions are being made to K.S. 4 pupils
in recent documents (Citizenship 2000; Excellence in Schools DfEE, 1999).

Early work by Paul (1985) recommended that behaviour modification interventions
should no longer be seen as the sole intervention with children displaying emotional and
problem’ and ‘Multi-component treatment’ (p. 70).

The need for multifaceted and interagency interventions to respond to students’
multiple treatment needs has also been recognised by others. Strategies involving
interventions underpinned by behavioural, skills-based components can also be found in
the research on effective juvenile probation programmes. They stress the need to address
the essential aspect of responding to the self-concept impairment underlying the problem
(Carpenter & Apter, 1987; Lloyd et al., 1989).

Jones (1992) maintained that an effective programme for emotionally and
behaviourally disturbed children should include key components. He listed twelve
components of a behaviour management programme. Included in his assessment were;
using positive reinforcement, a behavioural counselling programme and a social skills programme, which were used in this study. This supported the work of Grosenick, George & George (1987) who recommended similar programmes. Jones (1992), commenting on his twenty years of working with emotionally disturbed children and their teachers, confirms that ‘neither behaviouristic nor affective methods can, in isolation, bring about long-term behavioural changes in seriously emotionally disturbed children’ (p. 266) and that traditional behaviouristic methods need to be supplemented with more recent cognitive-behavioural and social-cognitive interventions. These methods ‘need to be overlaid with insight-oriented approaches in order to address the underlying self-concept impairment suffered by these individuals’ (p. 230).

More recent work by Grizenko, Papineau, & Sayegh (1993) examined the efficacy of a multimodal day treatment with a psychodynamic orientation, on 30 children (aged 5-22). They met the Diagnostic and Statistical Manual of Mental Health Disorders-III-Revised (DSM-111-R) criteria for ADHD, oppositional defiant disorder, conduct disorder, or adjustment disorder with disturbance of conduct and were assigned to day treatment or a waiting list control. Analysis showed that the treatment group improved significantly more on measures of behaviour and self-perception, and six-month follow-up findings indicated that subjects had improved over time on all measures except academics. Grizenko, Papineau, & Sayegh, cite their results as evidence that children with disruptive behavioural disorders need treatment that combines multiple modalities. More recently Collins (1999) has documented a wide range of interventions for people (mostly adults) with emotional and behavioural difficulties that are represented in the literature.

It can be seen, therefore, that as children with emotional and behavioural difficulties have well-documented, multiple, complex problems, no single intervention is likely to adequately address them. Therefore, the current study used a multimodal intervention
package, as various multimodal intervention packages have been widely recommended in the literature as necessary in order to help combat their multiple difficulties.

4.3. PROBLEMS ENCOUNTERED IN THE MEASUREMENT OF THE AFFECTIVE STATES OF CHILDREN WITH EMOTIONAL AND BEHAVIOURAL DIFFICULTIES DUE TO UNSATISFACTORY DESCRIPTIONS OF THEIR MULTIPLE CHARACTERISTICS

Emotional and behavioural difficulty problems are described as being on a continuum (Cooper, 1996b) between behaviours that are challenging but within accepted bounds to those that are indicative of serious mental illness. Problems manifest themselves in both behaviour and academic attainment. Indicators of emotional and behavioural difficulties are: academic attainment lower than would be expected for a child of that age; child is withdrawn and lacks confidence; child has difficulty in peer relationships; attendance is irregular; evidence of eating disorders; evidence of alcohol or substance abuse; displaying unusual violent or disruptive behaviour; involved in bullying either as the perpetrator or victim, or there is evidence of a major problem at home; there may be significant mental or physical problems; or a sudden change in behaviour (Cooper, 1996b).

Students with emotional and behavioural difficulties also exhibit metacognition or executive functioning problems (Gresham et al., 1998; Rock Fessler & Church, 1997). They have, for example, difficulty in:

- controlling their behaviour
- understanding the negative impact of their behaviour on others
- inhibiting inappropriate behaviour of the above, caused in part by
(a) problems in self-monitoring and regulation
(b) failure to inhibit responses
(c) other executive skills

It is obvious that the above descriptors are very much 'catch all' and although, clearly there is some research evidence to support the assertion that children with emotional and behavioural difficulties can be described, the published literature is probably in agreement with Cooper (1996b) when he stated that most researchers and practitioners would admit that there is no single set of characteristics that can be said to be a satisfactory description of a child with emotional and behavioural difficulties. The writer, for example, has noticed that children with emotional and behavioural difficulties have also been referred to in the literature as passive/aggressive, conduct disordered, oppositionally defiant, oppositional, acting out, learning disabled, low achieving, educationally mentally retarded, mildly handicapped, delinquent and as having Intermittent Explosive Disorder (Lybic Dysmodulation Syndrome) and that these definitions are rarely operationally defined. If we accept Cooper's assertion, then we would be wise to employ a variety of measures that are capable of assessing change in children with emotional and behavioural difficulties in both their behaviour and their Affective state.
4.4 THE VALUE OF MULTIPLE MEASURES IN RESPONSE TO THE OVERLAP OF CLASSIFICATIONS/DEFINITIONS OF STUDENTS WITH SPECIAL NEEDS IN COMPARING RESEARCH STUDIES

In this section we examine the problems caused by the overlap of classifications/definitions of students with special needs in comparing research studies, and how a strategy of multi-intervention and assessment can go some way to alleviate these problems. Reasons as to why we need a multitude of measures, are firstly, the literature is not in agreement that all populations described as emotionally and behaviourally disturbed are alike. Secondly, one single measure of assessment will be inadequate to discriminate any postulated positive impact of an intervention(s) for all children who have emotional and behavioural problems as the category of emotional and behavioural difficulty is a continuum rather than a discrete entity and is therefore very diverse.

One of the most difficult determinations to make is whether a learning disability exists in a child with emotional and behavioural difficulties when the emotional disturbance is, by definition, affecting educational performance. As noted earlier, research suggests that different measurement methods result in the identification of different populations, especially when attempting to classify children with potential emotional and behavioural difficulties (Reynolds & Lakin, 1987). One major concern is that the overlap between the disability categories may have compounded efforts to discriminate populations both in terms of diagnosis and utility of screening and assessment instrumentation and functionality (Hinshaw, 1994).

Early research have found the overlap of emotional and behavioural difficulties with other special needs categories has caused problems in differential diagnosis efforts and
limited the utility of screening and assessment instrumentation (Algozzine et al., 1984; Hinshaw, 1987)

In the past problems were also caused in classification systems due to definitions incorrectly operationalised. If, for example, a learning disability is defined as a discrepancy between ability and achievement, a decision still needs to be made about how to operationalise this definition (i.e. Which specific devices or techniques are to be used?). The selection of one operational definition over another will not necessarily result in the same group of students being selected. So a classification made with one group of tests is not always generalisable to an identical classification based on other instruments. The reliance on categorical labels to characterise students therefore clearly limits the kinds of conclusions that could be drawn from much of the efficacy research (Epps, Ysseldyke & Algozzine, 1983). This could have a direct impact on the current intervention as a review of the literature clearly demonstrates that we may not be comparing similar populations even though they are described as such.

Ysseldyke (1988) found it very difficult to find strong support for classification practices, finding them focused more upon opinions, beliefs and practices than research. For example, only 28% of the 3,038 studies surveyed by Taylor (1980, cited in Ysseldyke, 1987) used terminology and classifications recommended in the current manual at the time. Smith et al. (1987) stated that many research reports limit meaningful interpretation due to the vagueness and inconsistency in the description of subjects and consequently researchers are hampered in replicating or extending their research. Practitioners are therefore uncertain about the application of any reported findings.

Indeed, the results of the efficacy studies on this older cohort may not generalise to the current group of educable mentally retarded students. This may, for example, have relevance for today's emotionally and behaviourally disturbed students, and be
compounded with time. More recent work has also shown that students may or may not be classified in a given category depending on the definition that is selected, the way it is operationalised, the idiosyncratic approach to assessment by the diagnostician, the degree of curriculum bias and the extent to which information on exclusionary criteria is used (Daniels et al., 1999; Gresham & MacMillan, 1997; Rock et al, 1997). This, obviously, has profound implications for the past, present and the current study as well as future research comparisons as mentioned earlier.

Cooper (1996b) and Ainscow (1997) in their overviews of past research into labelling reached similar conclusions to earlier research seen as still relevant today. They noted that labels are still applied imprecisely, stigmatise children and yield too little information for planning. Furthermore, the classification of children with multiple problems in terms of a dominant set of attitudes leads to neglect of other conditions. As labels tend to be deviance oriented, they are insensitive to rapid changes that can take place in children, and they may result in the disregarding of important aetiological factors.

Some researchers maintain that identifying children with behavioural (and learning) problems poses an ongoing dilemma for school psychologists. The lack of clarity, particularly in Britain, with inadequate reliability and validity, compromise psychologists' efforts to make accurate and appropriate recommendations regarding educational placements. This is also the case in the U.S., where a great deal of the research is carried out on children with emotional and behavioural problems, with differing assessment practices and eligibility criteria amongst states, and different assessment procedures (Handwerk & Marshall, 1998). This of course, again, has profound implications for past, current and future research.

As has been mentioned more than once elsewhere, these problems impact on research studies, making comparisons between populations difficult and could go some
way to explain conflicting results in some studies (including the current study) of supposedly 'discrete' populations. This is discussed in more detail later in the conclusion.

Evidence that comorbidity is not simply a methodological problem or an artefact of referral has also been presented and reviewed (Angold, Costello & Erkanli, 1999; Cartledge & Milburn, 1978; Daniels et al., 1999; Gresham, 1987; Ollendick & Hersen, 1979; Place et al. 1999; Rock et al., 1997).

There are agreed and recognisable differences between groups of students with emotional and behavioural difficulties and other students with special needs, as well as differences between normal students. However, as the studies reviewed elsewhere show, there is little doubt that there is a considerable degree of concomitance between all 'special needs' groups of children. In connection with the above, researchers have recommended that multiple dimensions be evaluated in order to be sure that any changes, whether cognitive or behavioural, are spotted after (social skills) interventions. Data from more than one environment is necessary when assessing the impact of interventions for children with emotional and behavioural difficulties due to their wide diversity of problems (Ollendick & Hersen, 1989).

For example in their recent study, Royer et al., (1999) found that teachers noted positive changes in the adolescents' behaviour but those changes were not supported by systematic observation data. They concluded from their results that only a change in the perception by the students of some of their own social skills took place. They also concluded that 'an effective (social skill) intervention must be based on multi-assessment, multi-intervention, multi-environment and multi-outcome measures (p.8). They also maintain that 'when working with students with emotional and behavioural difficulties there are important limitations to the efficacy of interventions taking place in school alone. The complexity of behavioural disorders makes it mandatory to implement interventions in the other living contexts of adolescents' (p.8).
In summary, in the light of the current published literature, it would be prudent to wait for more definitive research on evidence for or against real differences amongst categories. As noted above, research suggests that different measurement methods result in the identification of different populations, especially when attempting to classify children with potential emotional and behavioural difficulties. It is vital, therefore, to have multiple resources to tease out the differential effects of interventions as studies of children with emotional and behavioural difficulties may not be comparing 'like with like'.

4.5. THE VALUE OF UTILISING RATING SCALES

The value of utilising rating scales such as Self-esteem inventories, Locus of Control, work with/play with scales, Rutters B2 and Coopersmiths Behaviour Rating Form is the ability to compare rating across different groups such as those of teachers and care staff. The scales can then be directly compared with other similar report measures, with each of these measures designed to make comparisons from a standardised sample. Such measures have, for example, economic utility, comprehensiveness and are directly quantifiable. A further advantage of rating scales is their ability to spot behaviour that may be missed or that is not so easily quantified by other methods.

Reschly (1987) used peer rating formats in which children rate each other according to how much they would like to play with or work with each other. He found the largest difference between the ‘work with’ scale between handicapped and non-handicapped children, suggesting that children make distinctions between different aspects of sociometric status and base their distinctions upon accurate perceptions of behavioural deficits. Even the criteria for Selecting Social Skills programmes has been a subject of debate. A surprising number of social skills training programmes has failed to select
skills for training on the basis of social validity, with skills selected unrelated to social outcomes. Many studies have selected social skills for training on the basis of the researcher's a priori notion of what constitutes socially significant target behaviours. Social skills, according to Gresham, should be selected on the basis of teacher ratings of the importance of social skills for classroom success or failure. Finally, and importantly for this current study, Gresham, Elliot & Black, (1987) suggest that targeted social skills should be selected on the basis of socially important criteria such as self-esteem (p.541).

When discussing assessment procedures for the existence of social skill problems Gresham (1987) and Gresham, et al. (1998) listed sociometrics, ratings or rankings by others (e.g. teachers and parents), self-report and behavioural role play tasks.

Rating scales also have disadvantages. As the 'behaviour' to be assessed is through 'indirect' assessment - we are not directly observing self-esteem, etc. We are observing behaviour vicariously. As such, the 'observations' made by significant others are subject to such variables as demand characteristics, social desirability and the expectations held by the respondent. The measures only provide an indication of the respondents' beliefs/assumptions about what they have observed. This, of course, may or may not be a reflection of their true behaviour.

Another particularly important limitation, according to some researchers, is that psychometric quality in the development of the scales is sometimes poor. Most rating scales, for example, are based on small homogenous samples that are not necessarily representative of the general population. They also lack any real interrelationships between more direct assessment strategies. They should, therefore, be supported by direct observation wherever possible, as in the current study.

Peer nomination measures such as those detailed above do have value in so far as they are taken to be representative of peer acceptance and liability and the measures are useful in determining impressions of change. However, peer nomination measures can
be seen as particularly appropriate for evaluating the effectiveness of social skill intervention in the current study as 'work with/play with' measures should reflect any change in their peers' social acceptance. One disadvantage of these measures, however, is that some researchers maintain that the effects (of social skills interventions, for example,) on peer behaviour may take some time and unfortunately 'work with/play with' measures have not often displayed significant changes when compared pre-and post-test. The reasoning behind this assertion is that it may not be as easy to change long-standing opinions of peers' social behaviours. A long period of sustained, appropriate improvement in social skill responses (response maintenance) may be necessary before one can expect changes to occur.

4.6. WHAT IS THE VALUE OF MEASURING SELF-ESTEEM FROM A CONCEPTUAL/THEORETICAL STANDPOINT

Although we take it for granted that we understand the hypothetical intervening variable of self-esteem, and that having a high self-esteem is a desirable quality, not all theoreticians and researchers necessarily agree. For example, Griffiths (1993) maintained that 'self-esteem cannot be improved by achievement and that the relationship an individual has to groups of people who are important to him or her is the source of self-identity, and so to the evaluation of the self' (p. 312). It can be seen that this has echoes of Cooley's ideas on self-concept formation.

London (1996), in discussing two major aspects of self-esteem in education and psychotherapy, maintains that trying to raise self-esteem is an unproductive diversion that does not lead to emotional health or long term enjoyment in one's existence. He proposes a definition of the self-esteem construct based on a meta-analysis of self-esteem theory/literature. According to him a summary of the data on self-esteem
research shows there is no evidence to support even a correlation between higher self-esteem and mental health, productive behaviours, or pleasure in living.

Harre (1998) also expresses strong reservations about the whole concept of self-esteem, referring to a substantial muddled literature on this topic. High and low self-esteem have been presented as if they were levels of a property of a person, like their weight. So an individual can have more or less self-esteem than another. He also criticises so-called 'instruments' measuring this alleged property. Answers to questionnaires only make sense if it is believed that the beliefs expressed in the answers are caused by this property and vary with its magnitude.

An alternative view that makes no use of mysterious cognitive properties is that people are called upon to construct a formal narrative expressing beliefs about likes and dislikes and draw upon implicit conventions for talking or writing about themselves. This brings into question the idea that there is some personal property, 'self-esteem', which is other than an examination of people's beliefs about themselves. How do we know, Harre asks, that this property exists independently of the 'conversational situation' set up in the experiment? According to Harre there are no grounds at all for the belief in the existence of self-esteem as a property of people. We would be far better to use Ockham's razor and especially avoid inventing imaginary attributes such as 'high collective self-esteem' offered by some researchers. Another mistake is to think that, in addition to the things that I think about myself and the groups that I belong to, there is something 'in me', i.e. my self-concept (Harre, 1998).

However, notwithstanding the above, the importance of self-concept in guiding human behaviour is generally recognised to exist and there has been considerable research, for example, into the relationship between self-concept and other variables such as locus of control, socio-economic status, intelligence, sex differences, social skills and positive self-verbal-referents.
As to the question do self-esteem interventions work, and can we measure improvements in self-esteem, Haney & Durlak (1998) as mentioned earlier, in their meta-analytic review of 116 interventions found that interventions specifically focusing on changing self-esteem and self-concept were significantly more effective than programmes focused on another target such as behaviour or social skills. Furthermore, treatment groups were more effective than primary prevention programmes.

Burns (1986), in his discussion of the limitations inherent in self-report techniques, maintains that self-report techniques are nevertheless a much simpler and more direct device than inference. It also lends itself to accepted research designs and to the application of well-tried statistical techniques. But despite such advantages, self-reports may obscure understanding, since they may not give valid reflections of subjects' self-concepts. A true picture of the self-concept may be obscured by such problems as defence mechanisms, social acceptability, lack of insightfulness, ulterior motivation and lies. Therefore scores must be interpreted in a guarded manner. Also, because of different theoretical stances and definitions, research studies test instruments may be looking at subtly different elements of self-conception without the particular interpretation being made implicit in the study. The degree of confidence that can be given to many of the instruments used, particularly in older studies, is questionable, with some lacking acceptable validity and reliability indices, if reported at all. It is pointless to argue over what is a person's 'real' self-concept since we have to depend on operational definitions. In the field of assessment the validity of any approach is governed by its utility as a predictor of behaviour. By recognising that personal meaning and interpretation are far more fundamental to self-concept investigation than truthfulness we are also recognising that self-concept assessment is not an exact and precise science and must imply approximation. This is in fact no different from assessment of most psychological constructs and some constructs in physics. For
example, no psychologist now accepts that an intelligence score is precise; it registers an approximate level of academic aptitude. This approximation in self-concept assessment allows the researcher to make use of the information as a guide rather than as a prescriptive device, and caution should be exercised in judging complex individuals rather than jumping to erroneous conclusions (Burns, 1986).

Pope et al., (1988) also points out that it is important to state at the outset that we cannot directly enhance self-esteem. Errors have been made in the past in trying to 'directly' enhance self-esteem. It is, of course, only possible to indirectly enhance self-esteem by changing one or more of the person's variables of behaviour, cognition, emotion or biology. It can be seen therefore that some researchers and theoreticians have misgivings about the whole area of self-esteem enhancement.

Gurney (1987) and Ogier & Hornby (1996) working with children who have emotional and behavioural difficulties found in actual classroom situations that increasing self-esteem is not as easy as generally touted in the literature. Therefore, in view of the above, it would be unwise to use a single self-esteem measure alone. A self-esteem measure should be seen as only one of many appropriate measures when attempting to assess changes following interventions with children who have emotional and behavioural difficulties.

4.7. DO CHILDREN WITH EMOTIONAL AND BEHAVIOURAL DIFFICULTIES ACTUALLY HAVE LOW SELF-ESTEEM OR EXHIBIT POSITIVE ILLUSORY BIAS/FALSE SELF BEHAVIOUR?

Self-concept is considered a critical variable in both general and special education, (Gresham et al., 1998) as evidenced by the large number of studies conducted using self-concept as an outcome variable (Gresham et al, 1998; Harter, et al., 1998; Wylie, 1961).
The field of special education has been continuously concerned in the broadest sense with children’s self-attitudes. Distinctions are made in more recent writings between self-concept and self-esteem, and other concepts that appear similar yet differ significantly from one another. Shavelson, Hubner, & Stanton (1976) compiled and distinguished 17 definitions of self-concept that have been used in the research literature. These various definitions of self-concept share six features: (a) organized, (b) hierarchical, (c) stable, (d) evaluative, (e) differentiable and (f) multifaceted.

However, the extent to which students with special needs/mild disabilities exhibit these six features has not been established. For example, self-concept seems to become more differentiated as children mature and is discussed in more detail later. Unfortunately, however, there are relatively few data to inform us regarding the extent to which children with various special needs, especially emotional and behavioural difficulties, are differentiated by self-concept. Moreover, self-concept may be correlated with different variables at different ages or year groups with social behaviour in Year 2 and physical competence and attractiveness in Year 7 for example (Gresham et al., 1998).

Another problem to which little attention has been given is that when comparing the self-evaluations of children with emotional and behavioural difficulties with those of normally-achieving students and other groups, generalisations are inferred about each group as a whole. Allied to this is the puzzle as to why some children with emotional and behavioural difficulties are able to maintain relatively high self-esteem whereas others are not, as mentioned above. (Some theorists speculate, for example, Harter et al. (1998), that the answer can be found in James’ theoretical model of self-esteem in which competence or success in domains of importance is a primary predictor of the overall evaluation of one’s worth as a person.)
As has been documented earlier a number of early researchers have suggested a link between self-esteem and children with emotional and behavioural difficulties (Miron, 1971; O'Leary & O'Leary, 1972), as has more recent research (Bracken, 1996; Maag & Behrens, 1998b), with a similar picture found in the research on the self-esteem of behaviourally disturbed adolescents. Early researchers have also suggested a link between higher rates of delinquency associated with lower self-esteem whereas others studies reported no differences. Yet other researchers have found that the self-esteem of some delinquent adolescents is elevated when they do not identify with the mainstream peer group and join gangs, thereby comparing themselves with a different reference group. Many experts in the field suggest that children demonstrating emotional and behavioural problems and especially those termed as displaying a combination of 'hyperactivity/inattention and conduct problems/aggression' behaviour pattern suffer from poor self-esteem (Gresham et al., 1998).

Hinshaw (1992) indicated that children with a history of externalizing, acting-out behaviour have lower self-esteem, which tends to co-occur with major depression by preadolescence. Based on his structural equation modelling investigation, Patterson (1986) argued that 10-year-old boys’ antisocial behaviour is directly related to poor self-esteem, poor peer relations, and academic underachievement. Barkley (1994) suggested that by late childhood many children with ADHD develop feelings of low self-esteem about academic and social abilities.

Gresham et al. (1998) questioned these positions and instead suggested that, if anything, many children evidencing an aggressive, externalizing behaviour pattern suffer from positive illusory biases in academic and social self-concept as well as global self-esteem. They maintain that there is reason to believe that some children maintain an overly positive view of themselves in spite of objective indices to the contrary in areas of peer acceptance, teacher perceptions, school adjustment, and academic achievement.
They based their hypothesis, in part, on research demonstrating a relationship between aggressive behaviour and egotism that suggest that a major cause of aggressive or violent behaviour is high self-esteem combined with external evaluations that challenge, contradict, or question an individual's competence or feelings of high self-regard. Gresham et al. (1998) cite other literature which supports this hypothesis such as unrealistically inflated levels of self-esteem in children with ADHD and aggressive behaviour patterns (Hoza, Pelham, Mulch, Pillow, & McBride, 1993).

A similar phenomenon of exaggerated or inflated levels of self-esteem has been found in samples of children with special needs, particularly those displaying learning difficulties but whether this is due to intentional exaggeration or a selective focus on positive information and a filtering out of negative information remains to be demonstrated. It is suspected that children having unrealistically inflated views of themselves in spite of objective evidence to the contrary tend to have more adjustment difficulties and may be more resistant to intervention efforts by school and community professionals (Bear & Minke, 1996).

Mixed findings are encountered when reading the literature on children with other special needs, such as children with learning disabilities regarding their self-concepts. As noted earlier in this study, the literature is quite clear that students with learning difficulties have lower academic self-concepts compared with normal students (Bear & Minke, 1996; Chapman, 1988). Chapman's meta-analytic review showed an average effect size of -.88 between students with learning difficulties and normal students in academic self-concept. Gresham et al.'s (1998) review of additional studies showed a similar effect size of -.79.

However, research contrasting students with and without learning difficulties reveals a conflicting picture when looking at global self-concept or self-esteem. Chapman (1988) reviewed 21 studies in which students with learning difficulties and normal
students were contrasted on general self-concept and found an effect size of -.50, with students with learning difficulties having lower general self-concepts than their normal peers. Similarly, Kavale and Nye (1986) showed an effect size of -.535 between students with learning difficulties and their normal peers. This suggests that approximately 70% of students with learning difficulties experience lower self-esteem than normal students.

More recent studies, however, have found no differences between students with learning difficulties and their normal counterparts on global self-concept (Bear & Minke, 1996).

There is far less available literature comparing the self-concepts of students with emotional and behavioural difficulties. An intriguing investigation by Hoza and colleagues (Hoza, Pelham, Mulch, Pillow, & McBride, 1993) showed that boys with ADHD, for example, were equivalent to controls in self-concepts of scholastic competence, social acceptance, physical appearance, and athletic competence. Interestingly, the global self-worth of boys with ADHD was almost identical to that of controls (3.30 versus 3.33, respectively). This positive self-image of boys with ADHD persisted in spite of clear academic failure and social rejection by peers. Hoza et al. interpreted their findings as an example of a positive illusory bias, which some authors have argued is related to positive mental health and adjustment. This positive illusory bias, sometimes called a self-serving bias, characterizes some students with emotional and behavioural difficulties, in that they take responsibility for positive social events and deny responsibility for negative social events. Similar findings have been reported for students with externalizing behaviour disorders (Gresham, MacMillan, Bocian, & Ward, 1997).

It can be seen, therefore, that children with special needs tend to hold realistic self-perceptions of their academic difficulties, perceiving themselves negatively in a domain of self-concept that most school-age children value highly (Chapman, 1988). However,
despite their unfavourable self-perceptions of academic competence, studies tend to show that many children with special needs manage to maintain positive feelings of global self-worth.

Various reasons have been given for the conflicting and equivocal evidence in the literature for the general self-esteem levels of various groups of students with mild disabilities. These include conflicting evidence due to methodological issues of sampling design, heterogeneity of samples, demographic variables, nosological error and the paucity of longitudinal research. These methodological issues need to be more fully addressed before the social competence and affective characteristics of children with mild disabilities can be more fully understood. The equivocal findings in the literature, according to Harter et al. (1998) are in part due to the investigators not directly examining the process through which special education students' judgements about their overall worth are formed and are further compounded by conceptual and measurement problems.

The discrepancy with these findings, according to some authors, can be explained by three main factors:

- perceived social support from significant others
- perceived competence in domains of self-concept other than academics
- 'discounting' (a mechanism by which children protect their self-worth by downplaying the importance of domains in which they are inadequate or lacking in confidence)

Of course there are other factors which have been shown to contribute to both over and underestimation of children's self-concept that are not individualistic, but are classroom and perception based (e.g. parental acceptance). Self-concept can also be enhanced by fostering increased motivation, or changing attributions of failure from internal stable causes to external or controllable causes known as locus of control which
will be discussed later in more detail. Self-concept, it appears, is affected and
determined by many factors, including external influences from the family, school and
classroom environments, as well as external factors related to individual cognitive and
affective prerequisites (Bear & Minke, 1996; Helmke, 1994; Morvitz & Motta, 1992).

There is evidence, therefore, from the affective education literature (which stresses
thoughts, feelings, and interpersonal relationships) that it is possible to develop a
positive self-concept and high self-esteem (Haney & Durlak, 1998). But until recently
this has been difficult to assess accurately due to methodological problems (Harre, 1998;
Harter, et al., 1998; King & Daniel, 1996). These include underlying conceptual
principles missing or vaguely addressed, an insufficient theoretical base to explicate
goals such as interpersonal understanding or self-awareness, confounding effects of
teacher variables and the usual methodological criticisms levelled at most educational
research for factors such as control groups, random assignment and instrumentation.

Also, as discussed earlier, according to some theoreticians, self-esteem
questionnaires (and the statistical analysis therein) cannot bring to light causal
relationships between unobservable causal properties (self-esteem) and overt discursive
effects because there are no such properties (Harre, 1998).

4.8. PROBLEMS ENCOUNTERED WHEN TRYING TO ACCESS THE FALSE SELF

A note of caution must also be sounded when attempting to assess self-esteem in
children with emotional and behavioural difficulties and/or special needs. This is
especially so for adolescents. Some recent studies, for example, have found
discrepancies in self-esteem reporting for this group in particular. For example, Stanley,
Dai & Nolan (1997) examined the differences in level of self-reported self-esteem (and
depression) between 28 ‘behaviourally disordered’ middle school students and 33
‘learning disabled’ students. They found the ‘behaviourally disordered’ group reported unrealistically high self-esteem.

Fegley (1997) in her thesis examining false self behaviour during early middle and late adolescence found that one needs to be cautious in assessing self-concept in early middle and late adolescence, as ‘false self’ behaviour may be a normative behaviour. In particular, amongst other findings, she found children with highly differentiated self-concepts and high levels of internal distress exhibit high levels of false self behaviour.

However, some authors insist that these speculations have not been systematically and empirically investigated (Harter et al., 1998), with investigators not directly examining the process through which special education students’ judgements about their overall worth are formed. This concern is not new. For example Lecky examined the relationship between self-esteem and school achievement in 1945. He used errors in spelling tests to conclude ‘some children were responding to how they felt they were as successful spellers rather than to the actual words required of them’ (Gurney, 1988, p.54).

Again, perhaps equally worrying are the findings of Versi (1995). He researched two groups of children identified as seriously emotionally disturbed and how they viewed themselves. They saw themselves as socially adequate even in cases when they had been completely removed from regular education classes because of their maladjustment. Versi’s results and those of other researchers who reported similar findings are a particular cause for concern because children who are unaware or unable to recognise they have a problem are unlikely to make progress.

Additionally, according to Gresham et al. (1998) we do not know if self-concept is stable for one group and unstable for another. For instance, it may be that self-concept fluctuates for children with emotional and behavioural disorders but is relatively stable for children with other special needs. Most of the systematic research in self-concept
among special needs populations has focused on students with MMR and/or students with learning difficulties. Little systematic research in self-concept has involved students with emotional and behavioural difficulties. Therefore, any conclusions as to outcomes of the efficacy of the research on self-concept in children with emotional and behavioural difficulties has to be in part extrapolation based on other groups of children who have special needs.

4.9. THE HISTORY OF FALSE SELF BEHAVIOUR

Research conducted during the 1960s on self-concept in persons with mild mental retardation yielded a mixed pattern of findings. Some of the studies reported lower self-concepts for groups of individuals with mild mental retardation, while others found the opposite. No difference in self-concept between the two groups with and without mild mental retardation was reported in one study. For example, up to the mid-1960s efforts were hampered by the fact that most scales were verbal in nature and required verbal skills (e.g., vocabulary) beyond those of most children with special needs. It was suggested that for children with mild mental retardation, for example, conceptions of their own retardation are so emotionally laden that they are incapable of accepting and admitting to, their limitations. As people with mild mental retardation may feel a need to protect themselves from negative evaluations, self-report measures must be interpreted with extreme caution. In fact, several authors concluded that in a majority of instances attributions of inferiority or incompetence were rejected because of a denial mechanism. Hence, this early research (before 1970) on self-concept in individuals with mild mental retardation alerted researchers to the fact that individuals who are unsuccessful at many life tasks may become defensive and deny negative statements about themselves, raising the possibility of invalid data and unrealistically favourable self-concepts being reported.
Therefore, we can see that evidence of false self-behaviour in fact goes back to the early 1960s (Gresham et al., 1998).

Commenting on the above research, Gresham et al. (1998) asked does one interpret high or favourable scores found for children with mild mental retardation as reflecting the effectiveness of treatments in protecting children from undue failure and their relative incompetence, or should these scores be interpreted as reflecting a refusal to admit to negative self-descriptions? They cite an investigation that suggested a link with the vulnerability of individuals with mild mental retardation to their low intellectual status. Two groups, one with and one without mental retardation, attending business school were instructed to pretend to insult someone with whom they were angry. Retarded individuals generated insults that were related to the intelligence of the people they were insulting, while the group without mental retardation provided insults directed at the character of the individual they wished to insult. These findings were interpreted as evidence of the vulnerability that persons with mental retardation feel toward their low intellectual status.

However, an alternative interpretation for what they termed the 'higher' self-concepts revealed by individuals with mental retardation comes from the work of Edgerton and Sabagh (1962). They used ethnographic methods, and 'self' was not measured with one of the existing self-concept scales. In their study of residents in a state institution for persons with mental retardation, they provided evidence that bears on the later speculation that labelling children as mentally retarded may lead to ‘mortifications of the self’. Edgerton and Sabagh report that labelling and placement in the institution resulted in certain ‘aggrandizements of the self’ for higher-ability individuals with mental retardation, since it permitted comparisons with a peer group of lower ability. For children from minority and/or low-socioeconomic-status backgrounds, labelling did not lead to mortifications of the self, because these children's families
frequently denied the validity of the diagnosis. They explained these results as denial which may have been attributed to several factors. For instance, the entire family of the retarded person may have been rejected and mortified by the community at large and feel the need to protect its members against the onslaught of ‘authorities’. Many of the mentally retarded come from families of low socioeconomic status, and family members may have had humiliating experiences with law enforcement or welfare agencies. Such a family will protect its members against those who ‘accuse’ them of mental retardation, and may not even believe that the accused is retarded. To them, this may simply be another instance of discrimination against the whole family (p. 265-266). Other researchers have found similarities, for example, Marsh et al. (1995) have utilized self-concept scales and described similar phenomenon as a ‘self-serving bias’.

Gresham et al. (1998) report on a series of studies on the experiences of children before they were placed in special education. Post-test-only findings of lower self-concepts by children with ‘mild mental retardation’ could reflect the effects of special class placement and labelling, the effects of experiences in regular education prior to placement in special education, or some combination of the two. Towne et al. (1967, cited in Gresham et al., 1989) administered a measure of self-concept of ability to 62 children prior to the notification of the children and their parents that they had been selected for placement in special education. This first administration was in the month of June. The scale was then administered again in September, December, March, and June of the following academic year, while the children were enrolled in special education. Contrary to the hypothesized decline in self-concept scores, self-concept of ability progressively increased from June through March and declined slightly in June of the following year. This pattern of findings is consistent with Edgerton and Sabagh’s (1962) ‘aggrandizement of the self’ and Marsh et al. (1995) ‘big fish, small pond effect’ experienced when the immediate social comparison group, by virtue of being less
capable, permits favourable comparisons. These findings are also consistent with results concerning mainstreamed and segregated groups of children with 'mild mental retardation'. It can be seen from the above series of studies that there is a history of children with special needs having differentiated self-concepts. What is also clear is the interpretation of this phenomenon is still open to debate.

4.10. SOCIAL COMPARISON THEORY

The theoretical explanations as to why some children with special needs, including those at Bridgeview School, have positive illusory bias of self-concept can be seen in the light of social comparison theory (Festinger, 1954). The work done with children with special needs, and in particular learning difficulties, may also be applicable to children with emotional and behavioural difficulties at Bridgeview School.

Evidence published to date that maintains the self-concepts of children with emotional and behavioural difficulties can be enhanced comes from the hypothesized benefits of mainstream education on the self-concept of students with learning difficulties and mild mental retardation. However, there is little evidence to support this assertion. The current author has found that the widely-held assumption in the literature that the self-concepts of children with emotional and behavioural difficulties can be enhanced, does not come from research carried out on the self-concepts of children with emotional and behavioural difficulties in mainstream education or otherwise.

Researchers such as Renick and Harter (1989) have invoked social comparison theory to explain the negative self-concepts found for mainstreamed students with learning difficulties. They maintained that children with learning difficulties compare their level of achievement with that of normal classmates and this comparison leads to negative academic self-concept. Chapman’s (1988) meta-analysis compared the
magnitudes of the differences in academic self-concept scores of children with and without learning difficulties in different placements across studies. Chapman reported effect size statistics of -.59 for segregated placement, -.68 for mainstream settings, and -1.31 for unplaced students with learning difficulties when compared with normal children. The unplaced students with learning difficulties had lower academic self-concept scores than approximately 90% of students without learning difficulties. Other researchers have also used social comparison theory to explain their pattern of findings on self-concepts of children with mild mental retardation placed in special day classes and mainstream settings, finding no differences as a function of placement. These findings have been explained by claiming that mainstreamed children with mild mental retardation compared themselves with other mainstreamed children with mild mental retardation rather than with their normal peers. Further, it has been argued that the social comparison group for students with mild mental retardation in special day classes was their special class peers. Coleman et al. (1983) found no differences in general or social self-concept between students with learning difficulties and students who were low achieving but had comparable academic skill levels in regular classrooms. These authors also interpreted their findings as being consistent with social comparison theory. 

Widaman, MacMillan, Hemsley, Little & Balow (1992) argued that their findings suggested greater complexity in defining the social comparison group than had been proposed in previous research. In their study, three groups of eighth graders were studied: (a) regular class students scoring above the 25th percentile on achievement tests, (b) educationally marginal students who were enrolled in normal classes but achieved in the bottom quartile on standardized tests of achievement, and (c) students with mild disabilities served in special education. The regular class students were significantly higher in academic self-concept than were the educationally marginal students and the
students with mild disabilities, while the latter two groups did not differ. Although this pattern of findings could be consistent with social comparison theory, the study also revealed ethnic group differences. Furthermore, the authors suggested the importance of more closely examining the role of disability group, educational placement, gender and ethnicity in determining how children define their social comparison groups.

More recently, some authors have suggested that the discrepancy between perceptions of academic competence and general self-worth can be mainly explained by two factors: firstly, perceived social support from significant others, such as teachers, parents, friends, and peers, and secondly, perceived competence in domains of self-concept other than academics. It is interesting that both of these factors are cited as important components of self-worth in Harter's developmental theory of self-concept (1988).

Harter et al. (1998) proposed discounting as a mechanism by which children protect their self-worth by undervaluing the importance of domains in which they are inadequate or lacking in competence. However, some studies (Smith & Nagle, 1995) have found that children with special needs do not discount the importance of academic competence.

An important implication of the social comparison process is that the self-perceptions of children with special needs are likely to suffer when the children are integrated into general classrooms, as a result of comparing themselves with higher achieving peers (Bear et al., 1991). A great deal of work has been done on the relationship between self-worth and reading and some authors suggest the results of these studies can throw light on how reading may protect feelings of self-worth. Bear et al. (1998) cited reading satisfaction as a mediator of self-worth. They maintain that not only should positive feedback enhance feelings of satisfaction toward reading, but this may also generalise to overall feelings of self-worth. Children attach great importance to
reading, therefore it seems likely that perceptions of positive feedback from reading would be associated with positive feelings of self-worth. However, this relationship would be an indirect one, mediated by feelings of satisfaction with, for example, reading.

According to Harter, perceptions of positive feedback are not the only self-protecting mechanism. Progress in academic subjects is only one of several domains that influence global self-worth and therefore the relation between feedback and reading satisfaction should account for only a small part of the child’s overall self-worth. Bear et al. (1991) found this relationship between reading and self-worth and maintained that it is important because it is directly under the control of classroom teachers. It can be seen, therefore, from the above research and theory that social comparison theory can illuminate why some children at Bridgeview School may have a positive illusory bias in their self-esteem.

4.11. PROBLEMS ENCOUNTERED IN THE USE OF SELF-CONCEPT SCALES

According to some researchers (Bracken, 1996; Marsh et al., 1998) the development and refinement of new and more psychometrically adequate scales for measuring self-concept has provided those conducting research on students with and without disabilities with better methods of indexing self-concept. Newer instruments permit examination of hierarchical and taxonomic models and a new generation of research on self-concept research that moves beyond whether a group’s global self-concept is higher or lower than that of a comparison group is imminent.

Scales tapping multiple dimensions of self-concept permit testing of some very interesting and potentially important questions about the consequences of children failing in school. For example: Do children whose failure in school occurs primarily in the academic domain have lower self-concept scores in the academic domain and
academic subdomains (e.g., math self-concept, reading self-concept) as compared with the non-academic domains (e.g., physical self-concept, and social self-concept)? If so, it may be possible to tackle these effects. Another advantage is that it may also be possible to stop the over-generalisation of the effects of academic failure into non-academic domains, despite being unable to prevent children who have special needs from evaluating themselves negatively in the academic domain. It is now possible to link dimensions of self-concept to achievement (e.g., reading, mathematics), social competence (e.g. peer acceptance, social skills), and other affective factors.

Recent models of motivation and behaviour, such as those proposed by Bandura (1982) and Harter (1988) highlight that satisfaction, dissatisfaction, pride, and shame follow from self-evaluations, and mediate subsequent motivation and behaviour.

Unfortunately, in studies of children with special needs, researchers have generally failed to investigate an affective component in the self-concept network. To a large extent this failure can be attributed to the content of popular measures of self-concept as most measures fail to distinguish items that assess evaluative judgments (e.g., ‘I’m good at reading’) from items that tap self-related affects (e.g., ‘I’m satisfied with my reading’). Most scales either combine both types of items or include only evaluative items.

Evidence is also available questioning the reliability and validity of some self-esteem instruments. King & Daniel (1996), when assessing the psychometric integrity of a self-esteem index for validity and reliability that collected data from 90 regular, 11 gifted and 86 special needs students, found various inconsistencies and a poor fit between anticipated and actual factors to the model data. A possible explanation of the results found in other earlier studies by researchers who found no differences in the general self-concept of children with special needs and normal adolescents, could be that items on well-known self-concept scales such as Piers-Harris and Coopersmith, tap a
potpourri of skills dealing with physical abilities, popularity, personality traits, affective reactions, and many others. As such, responses to this conglomeration of items are summed to supposedly yield an index of self-worth or self-concept. This explanation is very similar to the one mentioned earlier by Harter et al. (1998) and, as such, is probably valid. Today, of course, self-esteem is seen as multi-dimensional.

Some research examining the relationship between self-perceptions and school performance have shown a clear age-related pattern, with younger children having self-perceptions that do not reflect their real performance. For older children, with age and experience, self-perceptions are more in line with ability (Chapman & Tunmer, 1995). Other researchers have found that the development of accurate self-perceptions is not strictly a matter of age or school level, but is also related to cognitive development.

However, as noted earlier, the failure of researchers in the past to find differences in total self-concept were not surprising given the nature of the scales used. This also causes difficulties for current researchers when comparing past and present studies involving self-concept. Furthermore, until recently, investigations of constructs such as self-concept or self-esteem have been vaguely defined and did not point to any clear operational definitions. More recently, with improvements in measuring instruments, stronger theoretical models and improved methodology (Battle, 1992), research suggests that self-esteem is best conceptualised as a multidimensional construct and is much better able to differentiate between student populations. A specific problem is that some studies in the past used single measures of self-esteem whilst others used multi-faceted ones. This can also confound judgements on domain-specific inadequacies with more overall evaluations of worth or esteem. This may lead to the possibility of emotionally and behaviourally disturbed and learning disabled students reporting limitations in specific domains making their overall self-esteem lower, leading to differences between
these special populations and their normally-achieving peers that are erroneously inferred to be global self-esteem.

4.12. PROBLEMS ENCOUNTERED IN THE USE OF SELF-CONCEPT SCALES DUE TO AGE OR DEVELOPMENTAL DELAY

The origins of special education for students with special needs are intimately linked to considerations of the self-concept of these children. The development of hierarchical models (Shavelson et al., 1976) and scales that capture the multidimensionality of self-concept allows one to ask more sophisticated questions and examine developmental aspects of self-concept. For example, it is posited that the self becomes more differentiated with age.

Some researchers have found differences between the factor structure of a Self-Description Questionnaire II (Marsh, 1988), whereas others have found no differences for normal students, low-achieving normal students, and students with special needs receiving special education. According to Bear et al. (1998) the cognitive difficulties that are associated with young children could also be applicable to children who have emotional and behavioural difficulties. They share common problems such as; accessing past performance correctly, comparing their own performance to those of others, and distinguishing between ability and effort as determinates of achievement. These problems, in conjunction with a strong tendency towards wishful thinking and a great need for self-enhancement, foster an unrealistic positive self-evaluation. This raises some interesting questions about whether differentiation of self-concept is more related to stage of cognitive development (e.g. mental age) than to chronological age. If so, does differentiation proceed more slowly, but in the same manner for children with, for example, special needs (i.e., the similar sequence hypothesis)?
As stated earlier, researchers and theoreticians have focused recently on what is
termed positive illusory bias or false self behaviour, whereby children retain an overtly
positive view of themselves in spite of evidence from others to the contrary. Young
children tend to overestimate their own ability when it is assessed against objective
measures of performance or their actual standing in relation to others in the classroom.
They have been found to have an unrealistically high self-concept of ability in many
areas of competence, especially those related to high achievement. Also some research
suggests that children's self-concepts do not begin to correlate with actual classroom
performance till the age of about seven (Helmke, 1994). This has implications for the
current study as some of the subjects' standardised tests results demonstrated
considerable disparity between their chronological age and their test scores.

Obiakor & Algozzine (1994), in discussing self-concept in young children with
special needs, note that the operational model of self-concept is not always accurate,
consistent, extensive, overt and may change in different contexts. School and clinic
personnel should be aware that standardised instruments reflect the dominant society's
social ideals. This may be one reason for the equivocal findings of Schneider & Leroux
(1994) discussed earlier. When reviewing 25 controlled studies comparing the progress
of children (6-16 year olds) with behavioural disorders in different educational settings
Schneider & Leroux (1994) found that pupils in self-contained special programmes
displayed greater improvements in academic achievement than their counterparts in
regular classes. However the reverse pattern applied to changes in self-concept.

Bear et al. (1998) took a closer look at the role of perceived positive feedback and
social comparisons in the self-evaluations of children with special needs, as well as of
normally-achieving children. They predicted that the children with special needs would
differ from their normally-achieving peers in perceived positive feedback and social
comparisons, but that such differences would be largely a function of age or grade. They
cite important developmental changes that occur in self-evaluations just prior to the second or third year such as the development of a normative conception of ability and the expertise to integrate evaluative information from multiple sources (Harter, et al., 1998). These two related developments account for an increased consistency between children's self-evaluations and objective indicators of academic achievement, especially indicators of cumulative achievement and ability. They also largely account for declining self-perceptions of academic competence during the primary school years. Unlike during their first few years of school, older children no longer perceive success on easy tasks as evidence of high ability but instead consider multiple sources of evaluative information, particularly how well they are doing compared to others in their classroom. However, many children with special needs have delayed development and therefore normative comparisons are likely to occur later than for normal children. Consequently, even when faced with poor academic progress, children with special needs may hold onto their positive self-evaluations longer than normal-achieving children. However, because development of the ability to make normative comparisons should not be delayed more than a few years in children with special needs, a developmental delay would not account for favourable self-evaluations in the later primary grades.

Other factors may also influence a child's self-concept. For example, Chapman (1988) speculated that certain classroom conditions, such as frequent positive teacher feedback (mentioned earlier by Bear et al., 1998) and instruction commensurate with the child's ability and achievement levels, may actually overshadow or mediate any negative effects of social comparisons on self-concept. In support of this speculation, some research (Johnson & Johnson, 1981) has shown that children with special needs who receive remedial support, regardless of whether such support is in a mainstreamed or a segregated setting, have more positive self-concepts than children with special needs who are in general classrooms in which they receive no remedial support. However,
individual support in the classroom declines as children get older and coincides with a
general decline in self-perceptions of academic competence, perhaps in part due to a
curriculum that increasingly encourages normative comparisons, teacher/student
relationships that are less personal and positive, and a general devaluing of academic
tasks among students.

Bear et al., (1998) noted that where researchers developed and employed separate
measures of self-perceived academic competence and affect, a distinction between the
two subcomponents of self-concept was possible. For example, in a fairly recent study
they quote Chapman and Tunmer (1995) who showed that, with age, children come to
interpreted their findings as suggesting that a child’s affection for reading does not
necessarily reflect his or her competence in reading. They maintain that in the early
years one would expect children (including those with special needs) to be satisfied with
their reading, regardless of their self-perceptions of competence and their actual reading
achievement. Children with special needs would receive positive feedback for relatively
small reading gains. But, over time, children with an accumulated history of frustration
and failure in reading would come to be dissatisfied with their reading, and social
comparisons would come into play to a greater extent. Perceived feedback would
continue to be positive, but less so than their peers and it would no longer be as easy to
be happy about their reading progress.

It is possible that the cognitive difficulties associated with young children could be
applicable to children who have emotional and behavioural difficulties as they share
similar dispositions mentioned earlier, (accessing past performance incorrectly,
unrealistic comparisons of their own performance with those of others, and the inability
to distinguish between ability and effort as determinates of achievement). It is also
possible that these problems, in conjunction with a strong tendency towards wishful
thinking and a great need for self-enhancement foster an unrealistic positive self-evaluation.

Therefore, it is apparent from the above research that age or developmental delay could affect the evidence for the efficacy of self-esteem scales. Whilst this remains the case and the research is somewhat equivocal, again it is worth noting that it would be wise to take more than one measure as evidence of the efficacy of any intervention.

4.13. PROBLEMS ENCOUNTERED IN THE USE OF SELF-CONCEPT SCALES DUE TO TEACHER FEEDBACK

Another variable that can contribute to children’s perception of self-esteem was found by Bear et al., (1998). This is teacher feedback. This again demonstrates that it is perhaps necessary to have more than one measure of intervention success. It is possible that the uncontrolled variable of teacher feedback could influence any intervention without the teacher being specifically aware even of its existence. In their article on achievement-related perceptions of children with special needs, children with learning disabilities were compared to a normal sample. They examined group and developmental differences of self-perceptions of teacher feedback, social comparison of reading competence, reading satisfaction, and general self-worth. They assessed third and sixth graders with learning disabilities and normal achievement (n = 247). Relations among these variables and mean differences were examined within and across grades. The importance of perceived feedback was demonstrated in the relation to self-worth, which was generally positive among both achievement groups and within each grade. Through its relation to reading satisfaction, perceived teacher feedback contributed significantly to prediction of self-worth. Developmental differences and classroom factors that may explain their findings were discussed.
In a recent study of primary children with special needs, Bear and Minke (1996) highlighted the importance of positive bias whereby children with special needs protect their self-worth. As stated earlier, positive bias refers to the tendency to selectively focus on positive indicators of academic performance, such as grades and teacher comments, without necessarily ignoring learning difficulties. Consistent with the findings of studies of normal children they reported that primary children with special needs recognized that they had difficulties in learning but viewed themselves as performing well in the classroom. When asked how they determined how well (or poorly) they were doing, the majority cited positive feedback that they received (from the teacher) in their classrooms. None of these children mentioned social comparisons as a source of evaluative information. This finding contradicts the argument of many researchers (e.g., Renick & Harter, 1989) that social comparisons largely account for negative self-perceptions of academic competence among children with special needs, particularly those mainstreamed into general education classrooms.

As can be seen from the above research there are many factors to be considered in deciding the measures to administer to monitor interventions with children who have emotional and behavioural difficulties. One measure alone is inadequate to obtain a full picture.

4.14. POSSIBLE REASONS FOR THE EXPERIMENTAL AND COMPARISON GROUPS' SELF-ESTEEM SCORES BEING REVERSED BETWEEN ASSESSMENT AND PRE-TEST

An examination of the 'assessment' and 'pre-test' self-esteem scores in Appendix C show that there is a large unexplained difference between the global and domain specific self-esteem scores over the two time periods. This increases our suspicion that the
BCFSEI-2 may possibly be inadequate to assess the global and domain specific dimensions of self-esteem for the current population of children with emotional and behavioural difficulties in the current study.

By visual inspection it can be seen that the global self-esteem measures taken for ‘Assessment only’, and the pre-test scores taken just before the first intervention show that the experimental and control groups’ self-esteem scores are almost reversed. It is only possible to speculate as to the reasons for this phenomenon.

An examination of the results from the Lie scales in the Appendix only compound our fears. These concerns are raised due to the overall high degree of defensiveness/lying identified in this population. Yet according to some researchers we have better scales able to more accurately measure self-esteem (Gresham et al., 1998), whereas others are not so convinced. King & Daniel (1996) found problems with the self-esteem index, and Harter et al., (1998) found problems with earlier self-esteem scales.

A possible explanation for the experimental and comparison groups’ self-esteem scores being reversed between ‘assessment’ and ‘pretest’ could be explained with reference to problems with internal validity. Cook & Campbell (1979) define ‘internal validity’ as ‘the validity with which statements can be made about whether there is a causal relationship from one variable to another in the form in which the variables were manipulated or measured’ (p.38).

This differs from ‘external validity’ which Cook & Campbell (1979) define as ‘the approximate validity with which conclusions are drawn about the generalisability of a causal relationship to and across populations of persons, settings and times’. Threats to ‘external validity’ pose the question ‘How can I generalise from this one operation or set of operations to a referent construct?’ and it is what experimenters mean when they refer to inadvertent ‘confounding’ of results (p.39).
Cook & Campbell (1979) cite various threats to internal validity that may be applicable here (even though no actual treatment took place between assessment and pre-test). First is ‘History’. An observed effect might be due to an event which takes place between the pre-test and the post-test when this event is not the treatment of research interest (in this case the virtual reversal of self-esteem scores for the experimental and control groups between assessment and pre-test). The large time difference from one assessment to the other (18 weeks that included the summer holidays) allowed various uncontrolled external factors to come into play that could not possibly be accounted for.

‘Maturation’ is another possible explanation. This occurs when an observed effect might be due to a respondent’s growing older, wiser, more experienced etc. between pre-test and post-test and is not of interest to the research.

A third possibility is ‘Testing’ where the effect may be due to the number of times the children responded to the self-esteem measures (in this case twice only - so testing seems unlikely). Familiarity with a test according to Cook & Campbell (1979) can sometimes enhance performance because items and error responses are more likely to be remembered at a later date.

‘Instrumentation’ is another threat to internal validity. An effect may be due to a change in the measuring instrument between pre-test and post-test and not to the instrument’s differential impact at each time interval. Instrumentation is involved when subjects become more experienced or when a test shifts in “metric” at one point. This could have happened with the reversal of self-esteem scores for the experimental and control groups, as intervals for the BCFSEI-2 are narrower at the end of the scale (very high, high and very low self-esteem) than at the mid-points, (low and intermediate self-esteem) resulting in the possibility of ceiling or basement/floor effects.
'Statistical regression' also causes subjects to increase pre-test/post-test scores for low pre-test scores, since this group's pre-test scores are likely to have been lowered due to error and also decreases scores of subjects with high pre-test scores as their original scores are likely to have been increased through error. 'Statistical regression' does not affect scores amongst those at the centre of the pre-test distribution since this effect is likely to be averaged out. The group is likely to contain as many responses whose pretest scores are inflated by error as responses which are deflated. According to Cook & Campbell regression is always to the population mean of a group. 'Statistical regression' is a possibility here as the children could plausibly have been affected by the above variables.

'Selection' is another obvious possible problem here. This occurs when the difference between two populations is not strictly randomised, and is pervasive in quasi-experimental research (defined as different groups receiving different treatments as opposed to probabilistically equivalent groups receiving treatments as in a randomised experiment). It was not possible to have truly randomised samples of two groups due to the practical constraints of the day-to-day workings of Bridgeview School.

'Mortality' did indeed occur in the two groups. This is the effect due to subjects dropping out of the treatment during the course of the experiment. It is a selection artefact, as the experimental group is then composed of different kinds of people at the post-test. However the pre-test/post-test in this study compares the same children on both occasions.

A further possible explanation for the above results may be connected to the 'Hawthorne' effect whereby the children knew they were the subjects of an investigation and deliberately changed their behaviour, in this case their self-esteem questionnaire responses.
Another reason for the perceived anomaly of assessment and pre-test reversal is that the experimental group's teacher (the author being very aware of self-esteem 'unconsciously' in his teaching and general attitude) encouraged the children over and beyond what is standard practice and in some way this positively affected their self-esteem; the reverse being true for the teacher in class 4. It must be stressed that this is pure speculation and in the author's considered opinion unlikely to be accurate. Explanation one above (history) is perhaps the most likely.

Another explanation is that according to many researchers the operational model of self-concept for children is not always accurate, consistent, extensive, overt and may change in different contexts particularly for children who have emotional and behavioural difficulties. Measurement of self-esteem is also compounded by measurement problems. Furthermore, children with emotional and behavioural difficulties are not clear about how they think of themselves (Bear et al., 1998; Gresham et al., 1998; Harter, et al., 1998; Helmke, 1994; Obiakor & Algozzine, 1994; Renick & Harter, 1989; Widaman et al., 1992). The results of the current study (as shown by the discrepancies between assessment and pretest scores in the appendix) do lend tentative support to these assertions.

Worryingly, the results of the current study do lend tentative support to concerns that still even today may not have been adequately addressed in the areas of self-esteem measurement for children with emotional and behavioural difficulties. Early researchers (Kaplan, 1987) maintained that very often there is no evidence on which to measure progress and secondly the whole area of self-esteem is very complex. In order better to understand such concepts of self-esteem they suggest non-ambiguous descriptors of behaviour giving data about frequency and context.

Questions arising from the above results as to just how accurate are the children's perceptions of their own self-esteem, just how accurately are they reporting their own
self-esteem and just how much ‘lying’ is actually taking place, (either due to trying to please the experimenter or deceiving themselves) and how this may relate to the explanation of positive illusory bias/false self-behaviour is now more fully explored in the discussion.

4.15. THE PARTICULAR PROBLEMS OF ASSESSMENT WHEN MEASURING COGNITIVE BEHAVIOUR

Researchers operating within the paradigm of ‘cognitive’ behaviour have focused in recent years on the development of cognitive assessment methods but with little consensus in the approach to the measurement of cognition. As a result vastly different modes of cognitive assessment have proliferated, without adequate attention to validity issues. Indeed, measures of the same construct often do not correlate highly (Davison et al., 1997). The current study, therefore, sought to alleviate this potential difficulty by including a plethora of assessment measures designed to assess change in the children’s cognitions.

However, concern is expressed in some quarters regarding the difficulties in measuring cognitive constraints, in demonstrating a relationship between overt behaviours and unobservable cognitions, and in determining the causal links between cognitive phenomena and behaviours (Gerber, 1987). The development of cognitive assessment methods has produced little consensus in the approach to the measurement of cognition with findings that measures of the same constructs often do not correlate highly.

Think aloud methods, for example, have been used in educational research for the assessment of cognitive processes. Think aloud approaches assess thoughts concurrently with their occurrence, with participants verbalising thoughts whilst performing some
task or by using self-reports in interviews and on questionnaires. These require participants to introspect on both current states (e.g. ‘What do you think of that?’) and on how they retrospectively view their thoughts and feelings over a long period of time (e.g. ‘When you are being watched, what thoughts go through your mind?’). These approaches all have direct links to Piaget’s (1954) pioneering work with children, in which he generated hypotheses about their thinking based on their natural tendencies to talk out loud to themselves while solving problems. However, Piaget's research has recently been criticised for asking inappropriate questions and crediting children with insufficient common sense.

Many investigators have found and commented upon between subject variation in their studies of cognitive behavioural interventions, suggesting that results based on groups or averages may not be as relevant as individual case findings. For example, optimal intervention strategies vary across subjects, suggesting a simple behavioural intervention can be as effective as medication for some, but not all children with ADD (Hoza et al., 1993). However, Diaz & Berk (1999) outlined their concern at self-instruction training for children with behavioural difficulties. They maintain that it has repeatedly failed to promote self-control and academic performance. They critically examine four assumptions underlying self-instruction training:

- children with learning and behavioural difficulties show a lack of and/or deficient use of self-regulatory private speech
- modelling of self-verbalisations will increase children's spontaneous production of private speech
- speech and action are intrinsically co-ordinated
- internalisation refers to subvocalisation of private speech

They also argue that self-instruction training interventions need to be thoroughly grounded in Soviet development theory of verbal self-regulation and in systematic
research on the social origins and development of children's private speech. Diaz & Berk (1999) also point out that other recent cognitive behavioural studies examining self-concept have found mixed results.

4.16. SUMMARY

It can be seen from the above findings presented in chapter 4, two main strands are apparent in attempting to accurately assess the children’s behaviour (in its broadest sense) in the current study. Firstly, due to the multiple problems exhibited by children with emotional and behavioural difficulties, it is vital to have multiple measures in order to assess any positive gains from the three separate interventions. Secondly, concern is expressed that whilst each measure of change has value, each also has drawbacks.

Of further concern are the two problems of unsatisfactory descriptions of children with emotional and behavioural difficulties that pervade the whole area of special needs and the possibility of positive bias in self-esteem reported by children who have emotional and behavioural difficulties. Chapter 4 shows that the writer is not fully convinced that we are comparing like with like when research lists children as having emotional and behavioural difficulties. From the research presented in chapter 4 the writer is also not convinced that some children having emotional and behavioural difficulties, do not exhibit positive bias in self-reporting of their self-esteem. It is only by taking multiple measures of the children's progress throughout the three interventions that we are able to obtain a fully rounded, balanced and accurate picture of change.
CHAPTER FIVE

METHOD

5.0. GENERAL DESIGN OF THE STUDY

The research methodology employed in this study was selected in order to investigate the impact of three distinct self-contained interventions of social skills training, co-operative learning and positive self-talk on the self-esteem and behaviour of children with emotional and behavioural difficulties. Each self-contained intervention was sequentially applied in order to ascertain the effects on the children's self-esteem and locus of control, peer relationships, overt self-esteem, and overt behaviour. Behavioural observations in a controlled 'free-time' setting were conducted throughout the study in order to provide a measure of appropriate peer interaction.

There are two main methods of gathering and analysing data in research. These are known as qualitative and quantitative approaches and each is associated with different methods of collecting and analysing information. However, it is recognised that there is a degree of overlap between the two approaches. Researchers operating within the quantitative paradigm collect facts and study the relationship of one set of facts to another. They measure, using scientific techniques that are likely to produce quantified and if possible, generalisable conclusions. Researchers adopting or operating within a qualitative paradigm or perspective are more concerned with understanding individuals' perception of the world. They seek insight rather than statistical analysis (Bell, 1987).
Quantitative studies are thought to be more rigorous, giving more reliable data and a greater degree of objectivity, but only describe a small part of what is going on. Qualitative studies on the other hand, while far less controlled, are seen by some as more worthwhile, in that more information can be obtained. A consequence of this is in the organisation of that data and the greater risk of bias and less comparability or generalisability across studies. According to some researchers “Qualitative information is not reducible to quantity or amount. It is often difficult to demonstrate the reliability and generalisability of such accounts” (Sommer & Sommer, 1991). Quantitative research is seen as high in reliability and low in validity while qualitative research is seen as high in validity and low in reliability.

In deciding which of the above methods of analysis would be the most appropriate to elicit meaning from the current research, quantitative analysis with its emphasis on reliability, or qualitative analysis with its emphasis on validity, the following was taken into account. Most studies in the literature concerned with self-esteem and other affective variables of children are empirically based (they interpret the scores of self-esteem and other rating scales in some form of statistical analysis) and are primarily concerned with group results (nomothetic). In order to make viable comparisons with the established literature it was necessary for this study to follow suite. Furthermore, the data collection is theory led for the majority of studies in this area. Therefore the current study was primarily theory and data collection led using parametric and non-parametric statistical analysis to look for any difference between the experimental and comparison groups for all measures involving rating scales.

However, as Hitchcock & Hughes (1995) state, education is so complex that it is of very limited value to focus just on what can be statistically measured. Bell
(1987) maintained that it is perfectly possible to use qualitative methods in what is primarily a quantitative piece of research and vice versa, with Verma & Mallick maintaining that there is now a recognition that it can be useful to combine elements from both traditions.

With the above in mind, the small sample numbers could be seen as making interpretation of statistical analysis somewhat problematic. In an attempt to overcome this perceived difficulty, qualitative analysis was then used to 'track' individuals (ideographically) across all dependent variables. It was therefore thought prudent to use elements of both approaches to enable a fuller interrogation of the data.

Furthermore, in order to obtain a more rounded picture of the consequences of the three interventions, it was decided to employ a single subject research design for the experimental group only. This involved a ten day baseline of empirical, direct structured observation in a 'naturalistic' classroom situation. The purpose of the behavioural observations was to see whether the three interventions had any effect on overt observable behaviour for the experimental group and whether this behaviour had generalised to a 'naturalistic' classroom type environment. Observations took place in a 'naturalistic' classroom situation for a half-hour 'free-time' session on Friday afternoons. The three behaviours of 'positive' 'negative' and 'alone' were operationally defined and monitored for the duration of the three interventions.

A small pilot study was designed in order to assess the validity of the observations and recording procedures. This involved observing the behaviours of a group of children for functional analysis and provided a valuable opportunity to carefully analyse, discuss and assess the behaviours to be reinforced, operational definitions used and functionally analyse the validity of time sampling techniques and inter-observer reliability.
At the beginning of the study two groups of children in a local authority residential special school were assigned to either experimental or comparison groups. All measures were given to both experimental and comparison groups apart from the behavioural observations during the free-time sessions. These were carried out only with the experimental group.

All children in both the experimental and comparison groups rated their self-esteem, using Battle’s Culture Free Self-Esteem Inventory (BCFSEI-2) (1992). They also completed a measure of their locus of control using Norwicki and Strickland's (1973) 21 item questionnaire. In addition they also completed a measure of whom they would like to 'play with' and 'work with' using a peer roster and rating 5 point scale based on Singleton & Asher (1977). Teachers and care-staff rated the children's overt behavioural self-esteem using Coopersmith's Behaviour Rating Form (1967) and their overt emotional and behavioural disturbance with Rutter's Behaviour Questionnaire (1967). All these measures were obtained for both experimental and control groups before and after each intervention and at a 4 month follow-up.

Each separate intervention started with the direct teaching of techniques by modelling and behaviour rehearsal, role-play with feedback and reward. Each intervention lasted for thirty minutes, three mornings a week for a total of approximately seven weeks.

Teacher aides carried out behavioural observations during interventions and edible reinforcers (sweets) were given for compliance. The control group received the same average level of edible reinforcers but these were not given contingent upon their performance.

Each child was rewarded for compliance on a ratio of 4:1. Observations were taken on a time sample basis of once every minute for the thirty minutes, enabling each child to earn a maximum of 7.5 sweets during intervention 1 and 2. For intervention 3 the
reward schedule was periodically adjusted so that the maximum number of sweets that any individual child could earn was 7.5. The control group received the same average number of rewards, but not contingent upon their behaviour.

A baseline of the children's behaviour in a controlled free time naturalistic setting was obtained. This occurred every Friday afternoon and lasted for thirty minutes and took place throughout the duration of the three interventions.

The time table for the series of three sequential interventions of social skills, co-operative learning and positive self-referent verbal statements (PSRVS) for the experimental group is laid out below. The control group received no interventions.

10:06:95 BCFSEI-2 to assess prevalence of low self-esteem amongst all 31 middle school children
31:10:95 Pre-test of all measures before the first social skills intervention
15:12:95 Pre-test/post-test of all measures at the end social skills intervention/beginning of co-operative learning intervention
29:02:96 Pre-test/post-test of all measures at the end of co-operative learning intervention/beginning of PSRVS intervention
27:03:96 Pre-test/post-test of all measures at the end of PRSVS intervention
25:07:96 4 month follow-up post-test of all measures

5.1. SUBJECTS

The subjects were a small group (n=16) of emotionally and behaviourally disturbed children from two groups in a Local Education Authority residential special school. All subjects were placed in Bridgeview School after a process involving multiple agencies including the Psychological Service. They had a long history of family troubles/abuse.
and learning difficulties and behaved in an 'extreme' fashion. They exhibited anxiety, depression or withdrawal and/or vindictiveness, aggression, violence and defiance and frequently had to be physically restrained in the classrooms and dormitories. They swore, argued and interrupted and displayed 'clingingness'. At the work skills level they were generally unwilling to follow instructions and work unsupervised, with many engaging in self-injurious behaviour. Their classroom behaviour was often marked by some or all of the following: being out of their seat too frequently; deviating from what the rest of the class is supposed to be doing; not following instructions; talking out of turn or calling out; being aggressive towards classmates; having a short attention span and being easily distracted; bothering classmates by talking to them or intruding on their work; being oblivious and daydreaming; losing and forgetting equipment; handing in incomplete or sloppy work.

The groups were matched for age and academic achievement, using standardised reading and mathematics tests. Both classes were in the 'middle school' and had similar timetables and common teachers for all subjects.

Both experimental and control groups originally contained eight subjects each, but due to the effects of subject mortality (one attended infrequently and another returned to mainstream education) only six remained in the experimental group so complete data was only available for six subjects. The experimental group contained six boys only. The control group contained six boys and two girls.

The subjects were matched on the variables of age, standardised maths (Vernon) and reading (Neale) scores. Mean scores on these variables are presented in Table 1 below:
TABLE 1 MEAN SCORES ON READING AND MATHEMATICS

<table>
<thead>
<tr>
<th>Group</th>
<th>Age (years)</th>
<th>Reading Age (years)</th>
<th>Maths Age (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>12.13</td>
<td>9.46</td>
<td>9.46</td>
</tr>
<tr>
<td>Comparison</td>
<td>12.48</td>
<td>9.06</td>
<td>9.58</td>
</tr>
</tbody>
</table>

5.2 MEASURES

In order to ascertain whether training in the independent variables of social skills, a cooperative learning experience and positive self-referent verbal statements had affected the dependent variables under consideration the following measures were administered:

5.3. BATTLE'S CULTURE FREE SELF-ESTEEM INVENTORY (CFSEI-2)

Battle's Culture Free Self-Esteem Inventory (1992) (CFSEI-2) are self-report inventories for children (Forms A and B) and adults (Form AD). They are intended to measure an individual's perception of self, giving insight to subjective feelings.

5.3.1. BATTLE'S CULTURE FREE SELF-ESTEEM INVENTORY EMPLOYED BY OTHER RESEARCHERS

Battle (1992) cites studies by other researchers that have used the BCFSEI (Battle & Shea, 1989; Paananen, 1983; Stevenson & Romey, 1984; Yaniw, 1983). Battle cites two research studies measuring self-esteem and depression among elementary students. One where non-depressed groups earned higher self-esteem scores, and another where learning disabled students were split into least and most depressed groups, with the least-
depressed groups earning self-esteem scores that were significantly higher than their most-depressed counterparts on all facets of self-esteem. Also, linear correlations have been found between self-esteem and academic achievement and subjects with ADHD earned lower self-esteem scores than subjects who did not have this condition.

5.3.2. BATTLE'S CULTURE FREE SELF-ESTEEM INVENTORY EMPLOYED BY OTHER RESEARCHERS TO ENHANCE SELF-ESTEEM

Battle (1992) cites research finding significant gains in self-esteem as measured by the CFSEI obtained when children in an elementary school were exposed to the strategies described in Crucial Years for Self-esteem in Children and Youth (Battle, 1987). Similar results are described by Battle (1990) when the CFSEI was used to measure the self-esteem of a selected group of boys and girls from the Boys and Girls Clubs of Edmonton using the Crucial Years for Self-esteem in Children and Youth (Battle, 1987). Experimental subjects experienced greater gains in self-esteem scores between pre-and follow-up testing than did their control counterparts.

Strategies described in Crucial Years for Self-esteem in Children and Youth were used to significantly enhance the self-esteem of a group of elementary children (Battle, 1980). During the post-tests the experimental subjects earned total self-esteem scores that were significantly higher than those of their control group counterparts. Again, using strategies from the Crucial Years for Self-esteem in Children and Youth, students at all levels in the Barrhead School District in Alberta, experienced positive shifts in self-esteem.

Battle (1992) maintains that the studies cited in his manual, samples of which are presented above, provide evidence to counter Wylie's (1961) assertions that the
measurement of self-esteem often lacks validity, reliability, sensitivity to change and is
difficult to administer.

Form A, used in this study contains 60 items in five subsets:

- 1. General self-esteem 20 items
- 2. Social/peer-related self-esteem 10 items
- 3. Academic/school-related self-esteem 10 items
- 4. Parental/home-related self-esteem 10 items
- 5. Lie subset 10 items

(Form B is the shortened version of form A consisting of 30 items split into the same
subsets.)

The items are simple self-descriptive statements such as 'I spend a lot of time
daydreaming' with the respondent required to tick a 'yes' or 'no' box. Form A scores for
the CFSEI-2 are derived by totalling the number of items checked that indicate high self-
esteeem, excluding the Lie scale items. A separate score can be computed by totalling the
number of items checked correctly on the Lie Scale. Thus, the total possible score is 50
and the highest possible lie score is 10.

Battle's Culture Free Self-Esteem Inventory (CFSEI-2) classification of scores is
presented in the following Table 2:
Table 2: Battles Culture Free Self Esteem Inventory

(CFSEI-2) Classification of Scores (Junior)

<table>
<thead>
<tr>
<th>Score</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>47+</td>
<td>Very High</td>
</tr>
<tr>
<td>44-46</td>
<td>High</td>
</tr>
<tr>
<td>34-43</td>
<td>Intermediate</td>
</tr>
<tr>
<td>25-33</td>
<td>Low</td>
</tr>
<tr>
<td>-24</td>
<td>Very Low</td>
</tr>
</tbody>
</table>

Table 3 below illustrates how to compute separate scores for each of the subsets:

Table 3: Classification of Subset Scores (Junior)

<table>
<thead>
<tr>
<th>Subset</th>
<th>Very High</th>
<th>High</th>
<th>Intermediate</th>
<th>Low</th>
<th>Very Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>19</td>
<td>16-19</td>
<td>12-15</td>
<td>9-11</td>
<td>8-</td>
</tr>
<tr>
<td>Social</td>
<td>10</td>
<td>8-9</td>
<td>6-7</td>
<td>4-5</td>
<td>3-</td>
</tr>
<tr>
<td>Academic</td>
<td>10</td>
<td>8-9</td>
<td>6-7</td>
<td>4-5</td>
<td>3-</td>
</tr>
<tr>
<td>Parental</td>
<td>10</td>
<td>8-9</td>
<td>6-7</td>
<td>4-5</td>
<td>3-</td>
</tr>
</tbody>
</table>
5.3.3. LIE SUBTEST

The Lie subtest measures defensiveness. According to Battle, individuals who respond defensively to the self-esteem items refuse to ascribe to themselves characteristics of a generally valid but socially unacceptable nature. The lie subtest comprises items such as 'I always tell the truth'. Lying, or not telling the truth, some of the time, is a social convention - but it is also considered to be undesirable behaviour. Individuals who deny this common social fault would tend to be more defensive than the person who would admit it.

The Lie subtest was standardised on 531 boys and girls in grades 7 through 9 in a 'moderate' size school district in Western Canada. Scores ranged from 0 to 10, with 94% of the subjects earning a score of 5 or more - indicating the majority of the sample displayed a lack of defensiveness when responding to the questionnaire items. Battle maintains that this confirms earlier observations indicating that children generally provide authentic responses to self-esteem questionnaire items.

5.3.4. RELIABILITY AND VALIDITY OF BATTLE'S CULTURE FREE SELF-ESTEEM INVENTORY (FORM A)

Battle (1992) cites nine separate studies (1976a, 1976b, 1976c, 1977a, 1977b, 1977c, 1977d, 1978a, 1978b) conducted to establish reliability and validity estimates during the initial development of the CFSEI-2. To obtain test-retest reliability 198 boys and girls in grades 3 through 6 in three separate schools were used. Correlations between test and retest were between .81 and .89. The average means for the total group were 35.23 and the correlations for the standardisation sample were significant for all subsets and ranged from .74 to .93. Similar results were obtained in a study (Battle, 1978a) that employed
boys and girls in grades 1-8 in thirty two separate schools. The mean for the total group was 36.54. Test-retest correlations of .91 were found in another study administered to 117 boys and girls in grades 7, 8 and 9. The average of the means was 37.11 for the total sample.

Validity studies, carried out to assess whether the instrument measures what it purports to measure are also quoted in the manual. Battle’s construct definition of self-esteem as measured by his instrument is ‘Self-esteem refers to the perception the individual possesses of his or her own worth. An individual's perception of self develops gradually and becomes more differentiated as he or she matures and interacts with significant others. Perceptions of self-worth once established tends to be fairly stable and resistant to change’ (Battle, 1992).

Concurrent validity was explored (1977b) through a comparison with Coopersmith's Self-Esteem Inventory (1967). Correlations between the two instruments were significant for all grade levels when male and female scores were compared. Correlations for the total sample were .71 to .80. Battle's CFSE-2 also correlated well with other measures of personality, including Beck's Depression Inventory and the Minnesota Multiphasic Personality Inventory (MMPI).

Battle's CFSE-2 has been widely used to assess self-esteem and evidence is presented in the manual assessing the relationship between self-esteem and perception of ability. A correlation of .70 was found.

Correlations between self-esteem and intelligence, derived from IQ scores from the Canadian Lorge-Thorndike Intelligence Test were low at .15 showing no significant relationship between IQ and self-esteem.

Correlations between self-esteem and teacher ratings of the subjective reports of students as measured by Battle's Teacher Behaviour Rating Form (1981) were .36. For school-related self-esteem the correlation was .11. Mixed results were found. Relations
between teachers’ evaluations and students’ self-report were significant for combined
sexes and males, but not for females. The relationship between teachers’ ratings of the
children and school-related self-esteem was not significant.

These low correlations between teachers’ ratings of behaviour and school-related
self-esteem provide, according to Battle, additional support for the theoretical position
that self-esteem is not dependent on any one factor (e.g. academic achievement), but on
a combination of factors.

A high inverse correlation was found between self-esteem and depression in Battle's
(1978b) study. The data confirmed that depression in adolescents is associated with low
self-esteem. The 26 students tested had a mean age of 16.0 and a correlation of -.75 was
obtained between self-esteem and depression on the MMPI. Later studies confirmed
these findings (Battle, 1981, 1984, 1987).

In a study of self-esteem and learning difficulties, 97 academically successful
students were compared with 90 academically unsuccessful subjects who were
experiencing deficits of two years or more in reading and/or arithmetic. Successful
students earned self-esteem scores that were significantly higher than their less
successful counterparts.

A high inverse correlation of -.73 was obtained with 365 junior high school students
by Battle in 1987 when comparing scores of the CFSEI with the Relative Anxiety Scales
for Children and Adults (RAS) for children (Form Q).
5.4. CONTRASTS OF BEHAVIOURAL AND TRADITIONAL APPROACHES TO ASSESSMENT

Some of the most critical differences between traditional and behavioural assessment lie in their basic conceptualization of personality. Where ‘traditional’ assessment sees behaviour as indicative of underlying traits and characteristics that need to be assessed, behavioural assessment concentrates on the observable behaviour and its related antecedents and consequences. This basic difference results in varying methodologies for assessment. Behavioural assessment therefore relies more on direct observation of behaviour in the setting where it is naturally occurring.

In behavioural assessment, all behaviour is assumed to be situationally specific. This implies that any particular behavioural problem is a function of the variables present in the setting in which it was observed. Attempts to suggest that the behaviour represents a pattern that will occur in all (or most) situations are suspended pending empirical verification. Causes of the behaviour are related only to an examination of events that precede (antecedents) or follow (consequences) the occurrence of the behaviour. Therefore, before a behaviour is deemed to be cross-situational, assessments must be conducted in a significant number of different and similar situations (Shapiro, 1988).

From a traditional perspective, personality refers to the collection of enduring states or characteristics that pervade the individual’s interactions at all times. These traits are ‘intrapsychic’ and derive from the combination biological (genetic) and learned responses that are enduring and can be identified as underlying current behavioural difficulties. ‘Traditional’ assessment measures, (i.e. non ‘behavioural’), evaluation of behaviour is attained by using the psychometric properties ascribed to questionnaires etc. These have standardised norms, reliability, and validity. A traditional assessment, for example, would suggest that if a child has emotional and behavioural difficulties, the
child will display emotional and behavioural difficulties in school, home, and with his or her friends.

Criticisms can be found in both camps. Early researchers found many personality traits did not remain stable over time. Evidence from the behavioural assessment literature suggested that assessment of the same behaviour from different ‘response modalities’ such as cognitive, motor, or physiological did not commonly correspond and informational cues, setting, and the presence of observers have all been found to influence behavioural outcomes. Also, behavioural paradigms provide no conceptual framework for the ultimate understanding of individual differences in cognitive processing or neurological functioning that could help our understanding of why some teaching approaches succeed whilst others fail with different children (Margerison, 1996). Therefore, both traditional and behavioural assessments were used in the current study.

5.5. OBSERVATIONS OF BEHAVIOUR IN A FREE-TIME SETTING

A baseline of the children's behaviour was established prior to any interventions, for thirty minutes on Friday afternoons. In this phase, ten weekly observations of the three target behaviours for the experimental group were recorded, while the teacher continued to respond to the behaviour of the group as before.

During the guided ‘free-time’ sessions the experimental group had access to a variety of materials and spent as much or as little time as they chose engaged in fun-type activities for thirty minutes. Whilst adults were present and occasionally joined in discussions, they did not organise or direct activities. The reliability and validity of the observations and recording procedures of the experimental group were established in the pilot study for functional analysis. After discussion with all staff, behaviour was
categorised by operationally defining each as 'positive social interaction', 'negative social interaction' or 'alone'. The behaviour was recorded in a time sampling interval of one minute (Ladd, 1981; Royer et al., 1999).

Examples of positive social interaction were the child smiling, talking/playing in a 'sensible' manner (e.g. talking in a moderate voice tone/volume and working on a joint activity or task).

Examples of negative social interaction behaviour were a child behaving aggressively or negatively towards another by expressing hostility (e.g., physical or verbal abuse, taking another's materials, spoiling the activity, shouting out or conversing in a loud tone/volume, name calling, derisory comments, teasing or giggling inappropriately or excessively.

Examples of behaviour that was classified as alone were children not actively involved in the activity who were physically and spatially separated by two metres and were making no effort to interact either physically or verbally. They could be engaged in a constructive solitary activity.

Wandering around the classroom aimlessly or engaged in a destructive activity by themselves was categorised as a negative social interaction. Whilst it can be easily justified categorising two or more pupils collectively wandering around the classroom aimlessly as negative social interaction, a solitary individual wandering presents more difficulty. Whilst manifestly 'alone' it was nevertheless decided to categorise aimlessly wandering around the classroom as negative social interaction as the immediate object of the social skills intervention was to encourage and enhance positive social interaction.

As the important variable was the number of positive social interactions, whether wandering around the classroom aimlessly was characterised as 'alone' or 'negative' social interaction is somewhat academic for the purposes of this study, but does
demonstrate some of the problems encountered in operationally defining behaviours into various behavioural categories.

Observations were conducted with an instantaneous time (scan) sampling procedure (Ladd, 1981) and children were observed in a predetermined random order. Observers focused briefly (1-2) seconds on a target child and immediately coded his behaviour into one of the three categories, then focused on a second child and immediately recorded his behaviour into one of the three categories, until all of the children were observed. Once the cycle was completed, a second cycle was started on the stroke of each minute, throughout the duration of the thirty minute period.

The children were allowed to interact with each other during the guided free-time sessions with the minimum of adult attention. The author and at least one teacher’s aide remained in the room throughout the session and gave the appearance of being actively involved in some administrative task. However, should some severely disruptive behaviour occur, the adult would intervene as unobtrusively as possible, perhaps removing the pupil for a short time-out period.

Data were collected on each of the students throughout the study by at least one teacher’s aide. A percentage of intervals was computed for each behaviour category by dividing the number of intervals marked with a specific category by the total number of intervals observed and multiplying by 100 (Lewis, 1994).

The recorder on the stroke of every minute would look up and locate each child in a preordained sequence, then record the behaviour as either positive or negative or alone. The next child on the list was then observed and the process repeated for the duration of the 30 minute free-time session. The same materials were available for each session. Examples of activities available were construction-type activities, word games, small toy games etc., computer games, drawing and colouring worksheets. The instructions at the beginning of the activity were always the same: ‘You have a free choice for the next 30
minutes. You can play with any of the materials so long as you do so in a sensible fashion.

5.5.1. THE VALUE OF THE GUIDED, HALF-HOUR, FREE-TIME SESSIONS

Two major directions in assessing social competence have evolved; sociometric assessments (e.g. peer nominations and peer ratings scales) and naturalistic observations of social behaviour (Cooke & Apolloni, 1976).

Naturalistic observation has distinct advantages over sociometric assessment and has been subjected to empirical methodological investigations. It is conducive to repeated measurements in both groups and single-case experimental designs, and it allows researchers to monitor the daily variability of a child's social behaviour to establish trends in response patterns. Qualitative aspects of social interaction, in the form of positive and negative categories have been shown to have predictive qualities using sociometric measures as criteria. It also allows for specification of antecedents and consequences of social interactions. Behavioural observations have also been successfully used as selection and outcome measures in social skills training research (Foster & Ritchley, 1979; Gresham, Elliot & Black, 1987). Observations of social behaviours in naturalistic settings (e.g. classrooms, playgrounds, etc.) have several advantages over other social skills assessment methods. They are able to measure behaviour, crucially, at the time and place of its actual occurrence. Furthermore, behavioural observations are sensitive to the effects of social skills training interventions (Cooke & Appollini, 1976). They also allow for the making of within-subject variability and fine grain functional analysis where antecedent, sequential and consequent conditions surrounding the social behaviour can be analysed. Furthermore, observational data require operational definitions of the social skill being assessed rather than relying
on global, nebulous trait descriptions (e.g. friendly, co-operative etc.). Nevertheless, naturalistic observations also have disadvantages, such as observer drift, bias, cheating and sources of observation failures in combination (Kendall & Brasswell, 1984).

Gresham (1981a) remarked that few studies had investigated both behavioural observations and sociometric measures and hypothesised that peer nominations, rating scales and behavioural observations all measure different aspects of social competence and stated ‘rating scale measures and nomination measures assess different dimensions of sociometric status. Behavioural measures emerge as a separate factor suggesting that these measures assess a dimension of social competence that is independent from popularity or peer acceptance’.

According to Shapiro (1988) momentary time sampling involving recording whether the behaviour is present or absent at the instant the interval begins appears to be the best measure for estimating actual behavioural occurrence. Malik & Furman (1993) maintained that although parent, teacher and self-report measures are all useful means of obtaining information about a child’s peer relationships, they often do not provide precise descriptions of the nature and extent of the problem. Naturalistic observations in a guided free-time session can be extremely valuable, therefore, in assessing a child’s social relationships.

Examples of criticisms of measurement in general in this area can be found which cite a lack of detail in coding systems, a failure to control observer bias, drift and decay, and the use of error-prone time sampling procedures. Also, frequency measures of peer interaction are inadequate by themselves for describing children’s social behaviours. It is the quality of interactions that counts, and it was this that was assessed in the current study.

Rather disturbingly Gresham (1981a) maintained that the literature concerning the assessment of social competence was less compelling than the training literature.
Therefore the current study uses self-ratings, sociometric assessments (e.g. peer nominations and peer ratings scales), ratings by significant others and behavioural observations in a free-time session.

5.5.2. INTER-OBSERVER RELIABILITY

Inter-observer reliability was maintained by ensuring that at least 30% of sessions were recorded by two teachers’ aides. During the pilot study an opportunity to functionally analyse, agree and operationally define the targeted behaviours was afforded.

Reliability was calculated = \( \frac{\text{(No. of Agreements)}}{\text{(Agreements + Disagreements)}} \times 100 \)

The observer/recorders were trained until a 90% inter-observer criteria was obtained using the above formula (Kerr & Nelson, 1986). Children's behaviours in the free-time sessions were recorded (See Figure 2 for the graphed results). A total of ten baseline observations were recorded before commencement of the study. For the social skills intervention seven Friday afternoon free-time sessions were recorded. Four free-time sessions were recorded for the co-operative condition intervention, and four free-time sessions were recorded for the PSRVS condition, making a total of 25 sessions.

5.6. BEHAVIOURAL OBSERVATIONS FOR COMPLIANCE IN THE THREE INTERVENTIONS

After a functional analysis of behaviour during the pilot study it was decided to combine all of the categories of behaviour into just ‘compliance’ or ‘non-compliance’. This was
necessary in order to reduce the difficulty of recording behaviours in real time. Furthermore it was generally felt that many of the behaviours recorded either suffered from redundancy or gave no greater insight into the children's behaviour. All redundant behaviours could be successfully subsumed under the headings of either 'compliance' or 'non-compliance' without losing meaning. Therefore:

'Compliance' in intervention 1 (social skills) was operationally defined as looking at the teacher or pupil when and as appropriate; not talking when the teacher was talking; taking part in the set activity as and when appropriate in a 'sensible' manner.

'Compliance' in intervention 2 (co-operative learning) was operationally defined as looking at the teacher or pupil when and as appropriate; talking sensibly about the task in hand where appropriate; taking part in the set activity as and when appropriate in a 'sensible' manner.

'Compliance' in intervention 3 (positive self-talk) was operationally defined as the audible utterances of any PSRVS during each individual's allotted opportunity to speak about all his or her activities during the past 24 hours.

Teachers' aides during each of the three interventions carried out behavioural observations and edible reinforcers were given for compliance. At the stroke of every minute, for the 30 minute duration of interventions one (social skills) and two (co-operative learning), the recorder would look up and locate each child in a preordained sequence for 2 seconds and then record the behaviour as either 'compliance' or 'non-compliance'. The next child on the list was then observed and the process repeated for the duration of the 30 minute intervention. Each child was rewarded for compliance on a ratio of 4:1 for the interventions of social skills and co-operative learning, enabling each child to earn a maximum of 7.5 sweets.

During intervention 3 (self-talk), each child in a 30 minute period was given the opportunity to utter as many PSRVS as they wished and they were rewarded for doing
so. Seven subjects took part in this intervention with each allotted 4 minutes to tell the group about their previous 24 hours.

The recorders made a tally and the number of PSVRS were summed at the end of each session. The schedule of reinforcement was periodically adjusted so that the maximum that an individual child could earn was 7.5 sweets. This was achieved by tallying the number of PSRVS for each child, and dividing the total number of events of compliance (utterances of PSRVS) by the total possible number of events, as obtained by the child with the maximum that day, and multiplying by 100. Then allocating that number of PSRVS obtained by the child with the most as (100%), earning 7.5 sweets. All the other children were then rewarded on a percentage basis based on the maximum achieved by the child with the most PSRVS that day. This ensured that the number of PSRVS increased as the intervention progressed and that an inordinate number of rewards was not necessary.

The control group were given sweets to the average number of sweets earned that day by the experimental group for each of the three interventions. See appendix K for the results of compliance for the whole group.

5.6.1. THE VALUE OF USING BEHAVIOURAL MEASUREMENT

As noted earlier, there are problems in identifying children who are emotionally and behaviourally disturbed, both in the literature, in the classroom and in the clinical sample (Daniels et al., 1999; Rock et al., 1997). A behavioural approach to assessment and monitoring has, therefore, obvious attractions. We can simply observe whether the designated behaviour occurs and record how it changes against a pre-established set of criteria with each intervention over time. Observed behaviour can then be graphed and a visual inspection will show any change against the preset criteria over time. Lago-delello
(1998), in examining classroom dynamics and the development of serious emotional
disturbance, noted that Asher & Hymel, (1981, cited in Lago-dello, 1998) stated that
‘observational measures in naturalistic settings are perhaps the most valid of behavioural
assessment methods’ (p.136).

Behaviour modification, according to Smith (1996) means that problems are
described in terms of observable behaviour rather than statements about a child’s
personality or attitudes. Observing and recording what happens in the classroom
provides the information for planning interventions designed to change behaviour and
reduces imprecise or ‘fuzzy’ descriptions of a behaviour which can otherwise make it
difficult to record. Therefore ‘target’ behaviour has to be defined in terms of actions
which can be seen, and agreed to be seen, by separate observers. Smith also maintains
that the value of an intervention is based on the effectiveness of reinforcement and will
be the most powerful if it follows the target behaviour as soon as possible. This was
done at the end of each session in the current study.

Ormsby & Deitz (1994) examined the verbal behaviour of adolescents with
behavioural disorders in integrated classrooms and found that their verbal behaviour was
in fact similar to the verbal behaviour of their regular peers. It can be seen, therefore,
from the above research that behavioural observation does have distinct advantages.
Behavioural observation techniques are able to tease out subtle interactions that are
perhaps overlooked when using other complementary measures.

5.6.2. THE VALUE OF DIFFERENTIAL REINFORCEMENT FOR COMPLIANCE IN THE THREE
INTERVENTIONS

A system of differential reinforcement for compliance was used in the current study
during all three interventions. It is a powerful intervention strategy that will effectively
reduce the majority of inappropriate behaviours without the concurrent use of punishment (Webber & Scheuermann, 1991).

Differential reinforcement has many advantages and was used in the current study to ensure compliance. Webber & Scheuermann (1991) state the following advantages of differential reinforcement.

If the differential reinforcement system reduces the inappropriate behaviour, the teacher can avoid punishment and its side-effects. Most teachers are not effective punishers. They do not punish consistently, unemotionally, or contingently. Moreover, many students in special education have built up a resistance to commonly available punishments such as scolding, being sent to the office etc. They require much stronger sanctions that may not be available for a variety of reasons to school staff. Use of differential reinforcement can also help the teacher forestall the rage, avoidance, and anger reactions that often accompany the delivery of punishment.

Use of differential reinforcement will help ensure that the teacher is teaching prosocial behaviours. That is, he/she is proactive and not simply reacting in a manner of ‘crisis management’. As the teacher must specify a positive goal, assess the student’s current skill level relevant to that goal, provide direct instruction in deficient skill areas, and give the student feedback (e.g. reinforcement) regarding progress toward the goal, teachers are thinking in a constructive manner about behaviour.

Webber & Scheuermann (1991) maintain that differential reinforcement can be conducted in a variety of settings by a variety of people, thus adding to effective generalisation.

In summary it can be seen that the value of using differential reinforcement in this study is that it is a positive, relatively easy and effective method of reducing inappropriate behaviour by reinforcing positive alternatives to the undesired behaviour.
It entailed a shift from the concentration on what the children in the experimental group needed to stop, to focusing on what they needed to do instead.

5.6.3. THE VALUE OF TIME SAMPLING COMPARED WITH INTERVAL RECORDING

There are two basic ways in which to monitor and record behavioural events; interval recording and time sampling. Both have advantages and disadvantages, which are briefly discussed below.

For the purposes of this study, time sampling, as against interval recording, was chosen because time sampling is recommended for sampling behaviour across an extended time period and across settings, or if monitoring a number of pupils or behaviours without a block of time to devote to observing and recording (Kerr & Nelson, 1986). Time sampling is similar to interval recording, but the intervals are much longer (one to twenty minutes), are less frequent, and may be variable. There are many variations to this approach. For example, taking a five-minute sample out of every hour, or one momentary sample every minute (as in the current study), or sampling behaviour on a variable interval schedule. If a momentary time sampling procedure is used Kerr & Nelson (1986) recommend that one should rate the occurrence or nonoccurrence of the target behaviour immediately following a specified interval of time, with the timer set for the desired interval (e.g., one minute), and when it rings, record whether the behaviour is occurring. It is possible to have a timer set for variable schedules averaging four, eight, or sixteen minutes. The advantage of a variable observation schedule is the unpredictability of each interval. Students may be aware of the behaviour being observed, but cannot predict each interval and change their behaviour when the timer is due to ring. This strategy, however, was thought unnecessary for the current study.
Interval recording was not used in the current study. However, it is recognised as a versatile technique for recording both discrete and continuous responses, but, even with a stopwatch, interval recording tends to be unreliable and awkward. It requires the practitioner to devote their full attention to observing and recording, even though the technique has the advantage of allowing the recorder to observe several behaviours or pupils simultaneously (Kerr & Nelson, 1986). Interval recording also may be the most practical strategy if a response occurs too frequently for each instance to be counted, (e.g., handflapping or other stereotypical behaviours) but this was not the case in the current study. Interval recording breaks the observation period down into small intervals of equal length (ten, fifteen, or thirty seconds) and allows one to observe whether the behaviour occurs or does not occur in any given interval. It is recommended that the size of the interval be at least as long as the average duration of a single response, but small enough so that two complete responses cannot occur in the same interval. One may count a behaviour as occurring according to a proportion of the interval during which it took place (e.g., 50 per cent or more of the interval) or if the behaviour occurred at all during the interval. The latter procedure is easier and more reliable. According to Kerr & Nelson (1986), if it is necessary to observe several behaviours simultaneously, it may be easier to observe for one interval and use the next to record observations (ten seconds to observe, ten seconds to record, and so forth). It also is possible to arrange the recording sheet to allow more time for observing than for recording (fifteen seconds to observe, followed by five seconds to record, or three observation and recording intervals per minute).

In addition to being versatile, interval recording does not require sophisticated equipment.

A clipboard and a stopwatch are all that is necessary. Since interval recording does not provide a measure of absolute frequency, it is not appropriate to report the total
number of target behaviours occurring in a given observation period. Instead, the per cent of the intervals in which the behaviour was observed to occur is recorded. This is calculated by the formula:

\[
\frac{\text{Number of intervals in which behaviour occurred}}{\text{Total number of intervals}} \times 100
\]

Therefore, where behavioural assessment methodology was appropriate, time sampling methods were used throughout the current study.

5.7. LOCUS OF CONTROL

This section examines locus of control. Locus of control is not an intervention in the current study, like social skills, co-operative learning and positive self-referent verbal statements, but is part of the overall batch of further measures designed to examine what is generally or loosely termed affectance characteristics (Wang & Peverley, 1987). A number of affective characteristics have been investigated in samples of children having special needs, including those with emotional and behavioural difficulties. These affective characteristics have included, but are not restricted to, self-concept, achievement motivation, learned helplessness, affectance motivation, attributional style, school attitudes, loneliness, self-efficacy and locus of control (Gresham & MacMillan, 1997).

Locus of control is generally recognised as one of the more comprehensive and thorough areas of research undertaken in order to establish how children perceive the factors that influence their learning. Therefore, even though locus of control is not an intervention in this study, a relatively small section is devoted to this area. Firstly we
very briefly examine the rationale behind using the scale. Then a definition of locus of control is presented. This is followed by a very brief history of the concept and the theoretical ideas behind its inception. The role of self-esteem in locus of control is followed by a very brief overview of the research for interventions that have examined the role of locus of control on affectance motivation of children.

Within the affectance area of motivation there is a well-established literature of theory and research indicating a close relationship between school achievement and students' perceptions of their ability to exert control over their learning (Eslea, 1999; Gresham & MacMillan, 1997; Haugen & Lund, 1999; Hawkes, 1995; Ollendick & Hersen, 1979; Rotter, 1966).

Various researchers have postulated a link between self-esteem, perceptions of personal competence, locus of control, peer relationships and subsequent behaviour (Bandura, 1982; Gresham, 1988; Maag & Behrens, 1989b; Seligman, 1975). In actual school settings, children at greatest risk of being referred and classified as ('seriously') emotionally disturbed or 'behaviour disordered' etc. typically exhibit an externalising behaviour pattern marked by overt, outer directed, and under-controlled mode of responding to the environment (Kauffman, 1993). These behaviours are marked by defiance, antisocial behaviour, impulsivity and overactivity, and are frequently accompanied by academic underachievement, particularly in reading (Hinshaw, 1994).

Colman, Campbell, Hobson, McPartland, Mood, Weinfeld & York (1966, cited in Gresham & MacMillan, 1997), in a study of almost half a million youngsters across the United States, found that a belief in destiny was a major determinate in school achievement. They concluded that this pupil attitude factor had a stronger relationship to achievement than all the other school factors together. Similar associations between school achievement and perception of ability have been found by other earlier research (Crandall, Katkovsky & Campbell, 1965). More recent work has shown that students
who believe they can influence their learning are more likely to succeed than those who believe learning is controlled by powerful others or that achievement is unaffected by effort (Wang & Peverly, 1987; Eslea, 1999). Gresham & MacMillan (1997) found external locus of control is often characteristic of seriously emotionally disturbed students and therefore is of particular importance for this study.

Rotter formulated the definition of Locus of Control (within social learning theory) in 1966.

‘When a reinforcement is perceived by the subject as following some action of his own but not being entirely contingent upon his action, then, in our culture, it is typically perceived as the result of luck, chance, fate, as under the control of powerful others, or as unpredictable because of the great complexity of the forces surrounding him. When an individual interprets the event in this way, we have labelled this a belief in external control. If the person perceives that the event is contingent upon his own behaviour or his own relatively permanent characteristics, we have termed this a belief in internal control’ (Rotter, 1966, p.1.).

Therefore, according to Rotter, an individual identifies the force responsible for an experience as either internal or external. Individuals with an internal locus of control perceive themselves as determining events in the environment, whereas those whose locus of control is external perceive forces outside themselves as determining such events. Locus of control is determined by previous reinforcement history and can be conceptualised as a generalised expectancy regarding the effectiveness of one’s behaviour. Internally-oriented individuals report that effort and skill lead to successful outcomes while externally-oriented individuals report that outcome is related to luck or chance. It is an expectancy variable, which reflects a generalised expectancy regarding the effectiveness of one’s behaviour. According to Wang & Peverley (1987) specific
definitions of locus of control can vary from study to study. Rotter's formulation is, however, the basis for most definitions.

The history of locus of control includes research on the characteristics of the autonomous learner and generally includes the varied but semi-related terminology of the concept of 'self' and perceptions of personal control and achievement which have variously focused on: self-efficacy, self-worth, locus of control, motivation based on attributions of causality for success and failure, self-evaluation maintenance and perceptions and competence regarding self-responsibility for learning (Gresham & MacMillan, 1997).

The theoretical work on the inter-relationship between a student's perceptions of agency and achievement is suggested in work based on the competence-motivation theories of White (1959) and Harter (1982). According to these theories a child's intrinsic motivation to learn and his/her ability to master a task produces feelings of efficacy and competence that in turn reinforce further attempts at mastery. Harter et al., (1998) found that the pleasure of mastery is greatest when the subject accepts responsibility for success. Although the locus of control construct may have different meanings or emphasis for workers with different theoretical perspectives it is central to student learning.

As mentioned earlier, in the section on proponents of categorisation, two principal subcategories of childhood psychopathology have been identified (Gresham & MacMillan, 1997; Versi, 1995). These are internalising emotional problems (IEP) and externalising emotional problems (EEP). The first subcategory (IEP) includes forms of psychopathology characterised by inhibition, social withdrawal, shyness, anxiety, depression and problems 'within the self'. The second subcategory (IEP) includes psychiatric conditions characterised by hostility, oppositional behaviour, aggression and acting out against the environment or society. These two factors were found to be
consistent across samples differing in sex, age and sociometric status. Further differences between the two groups have been found. For example, externalisers have significantly greater involvement with the police and courts, are expelled from school more often and do less well academically (Gresham & MacMillan, 1997). They maintain that future research exploring this distinction between externalising and internalising behaviour patterns promises to be informative in describing the social path of children with behaviour difficulties in educational settings.

Success in learning also strengthens a student's perceptions of self-competence and personal control, whereas repeated failure weakens such perceptions (Wang & Peverly, 1987). Success enhancing self-perceptions of competence only if a student perceives or accepts responsibility for success. Therefore, research into the relationship between self-esteem and locus of control has been of interest to various researchers. For example Ellis (1998) cited 5 goals, principles and techniques for 'watering up' the curriculum for adolescents with special needs. He includes in his list intrinsic motivation, internal locus of control and social self-concept and self-esteem as necessary for affective development of adolescents with special needs.

Eslea (1999) hypothesised that persons with an optimistic attributional style have higher self-esteem than persons with a pessimistic style. That is, global and various specific domains of self-esteem are predicted to be positively correlated with composite attribution for positive events and negatively correlated with composite attribution for negative events. The process of internalisation of rewards will similarly be aided by internal, personal, controllable attributions for positive outcomes and external, universal, uncontrollable attributions for negative outcomes, since the former will enhance positive affect and self-esteem and the latter will minimize negative affect and reduce damage to self-esteem (Burgner & Hewstone, 1993, cited in Eslea, 1999).
Findley & Cooper (1983), in a meta-analysis of nearly 100 research papers, found a significant and positive relationship between locus of control and academic achievement. Covington & Beery (1976) stressed that feelings of self-worth and personal efficacy must be considered in any complete understanding of the dynamics of school academic achievement behaviour. There is evidence that students attribute success to effort and that such training can result in greater persistence in the face of failure (Andrews & Debus, 1978; Chaplin & Dyck, 1976, cited in Eslea, 1999). Hawkes (1995), in a literature review on how locus of control relates to early childhood, concluded that it is an important element of children's experiences and potential success at school.

In a more recent study mentioned earlier, Frankel & Myatt (1996), examining social competence using Achenbach & Edelbrock's Child Behaviour Checklist (1983), found that externalising behaviour was positively related to self-esteem with male 7-12 year olds who had difficulty making friends. Versi, (1995), in a study also mentioned earlier, found a differential treatment effect showing that externalising students were significantly more responsive than internalising students to teacher ratings of student social competence and school adjustment. However, students' social skills ratings were not affected.

The primary purpose of a recent study by Haugen & Lund (1999) was to compare attributions for positive and negative events in respect of correlations with seven personality dispositions. Their hypothesis was confirmed that attributions for positive events are differently correlated with the seven personality dispositions than are attributions for negative events including global and academic self-esteem.

Madden & Slavin (1983) reviewed research on the prognosis for mainstreamed children with academic handicaps. They found that interventions specifically designed to foster an internal locus of control and perceptions of self-esteem improved the academic progress of students.
Dudley-Marling, Snider & Tarver (1982), in a review article based on findings from seven studies of the perception of locus of control of special needs children, noted that they were more likely to perceive an external locus of control than were children whose achievements were above the norm. Six of the seven studies reviewed reported that an external locus of control was characteristic of special needs children.

Keogh (1982) maintained that the development of a sense of self-responsibility for learning is crucial for students who have histories of academic failure and poor perceptions of self-competence and personal control; characteristics that are frequently associated with students who are classified as having special needs.

Earlier work on interventions that specifically focus on fostering internal locus of control and perceptions of self-esteem have been demonstrated to improve the academic progress of students with a poor prognosis for achievement (Madden & Slavin, 1983; Wang & Walberg, 1983).

More recent work, such as Wiest, Wong & Kreil (1998), examined the ability of measures of perceived competence, control, and autonomy support to predict self-worth and academic performance with 104 'regular' education students, 54 special needs students and 93 'continuation' high school students. They found that indices of perceived competence, control and 'autonomy support' were significant predictors of self-worth and grade point average.

Similar results were also found in Eslea's (1999) small study of 26 boys aged 7 to 11 in a special school for children with behaviour problems in Lancashire. He concluded that, in his study at least, the depressed attributional style was associated with the persistence of behavioural problems, while the self-enhancing attributional style was associated with their amelioration. This is in direct contradiction to the hypothesis, based on the traditional distinction between internalising and externalising problems, that behavioural disorders might involve an excessive externalisation of negative
experiences. Instead, according to Eslea (1999), it seems that disruptive behaviour may be an internalising problem, or at least have internalising aspects, similar to depression.

Eslea (1999) speculated as to whether a depressed attributional ‘style’ is the cause or merely a symptom of behavioural problems. According to Eslea (1999) increasing the proportion of self-enhancing attributions (as in the current study where positive self-referent verbal statements are used) seems likely to improve behaviour. For example, Forsterling’s (1985) review of attributional retraining studies showed that a variety of different techniques can encourage children to make more self-enhancing attributions, and this will in turn affect behaviour. A teacher simply saying the appropriate attributions, or getting the child to say them, can have a positive effect. Others can model self-enhancing attributions, or subjects can be persuaded to alter their perception of an event by making positive attributions. With regard to behaviour change, attributions can also be influenced by positive reinforcement (Andrews & Debus, 1978, cited in Eslea, 1999). In other words, according to Eslea, it is possible to develop a kind of ‘meta-behaviourism’, in which it is not just behaviours themselves that are reinforced, but the underlying attributions. Teachers could look out also for self-enhancing attributions and reward them and in the process help a large number of disruptive children develop and succeed in changing their behaviour. (This has obvious parallels with the third intervention of positive self-referent verbal statements in the current study.)

Gresham et al. (1998), in their study of comorbid behaviour pattern of hyperactivity-impulsivity-inattention and conduct problems, with children having internalising and externalising problems and matched controls, noted the research of others (Hinshaw, 1992; Kupersmidt, Coie & Dodge, 1990; Parker & Asher, 1987) who have demonstrated that children with an externalising behaviour pattern are at risk of a number of pejorative outcomes. These are reading difficulties, peer rejection, classification and placement in
special education programmes as seriously emotionally disturbed, arrest and incarceration and school dropout. Reviews by Lynam (1996) and MacDonald & Achenbach (1996) have also shown that children with externalising problems are at long-term risk of developing severe and persistent anti-social behaviour.

However, Elliot (1996) cited the general consensus in the research literature that behaviourally disordered children have greater difficulty than their peers in recognising a contingent relationship between their actions and subsequent outcomes (they have a relatively external locus of control). However, studies have not examined intra-group differences within this population (which again has implications for the current study). In examining the relationship between specific behaviours and locus of control in studies containing in total 237 children with emotional and behavioural difficulties, Elliot found very little relationship between locus of control and behaviour, and suggested that clinicians should treat the construct's therapeutic importance with a degree of caution.

Not all researchers agree with the above formulation of locus of control. A problem with much attributional research to date, according to Eslea (1999), is that it is often based on forced-choice questions about hypothetical situations. This approach may tell us little about the way that children make real world attributions for events that affect their own lives. A more valid method is to identify attributional statements in natural discourse.

According to Eslea (1999), although mixed results can be found in the literature for the efficacy of affective educational interventions such as an internal orientation of locus of control and its relationship to self-esteem, the general consensus has highlighted the possibility that children with emotional and behavioural difficulties may in fact have an internalising as against a externalising disposition. However, as stated earlier, locus of control is central to student learning and is of particular importance for this study as an
external locus of control is often characteristic of seriously emotionally disturbed students (Elliot, 1996).

5.7.1. THE RELIABILITY AND VALIDITY OF NORWICKI & STRICKLAND’S MEASURE OF LOCUS OF CONTROL

Norwicki & Strickland’s (1971) measure of generalised locus of control in its full form is a pencil and paper measure. The 40 questions are answered either yes or no. The lower the score, the greater is deemed the level of internal locus of control. The items describe reinforcement situations across interpersonal and motivational areas such as affiliation, achievement and dependency. Examples are; ‘Do you believe that most problems will solve themselves if you just don’t fool with them?’ and ‘Are you often blamed for things that just aren’t your fault?’

Fifty nine items that made up the preliminary form of the test were given to 152 children ranging from the 3rd through 9th grades. Means ranged from 19.1 (SD = 3.86) at the third grade to 11.65 (SD = 4.26) at the ninth grade, with higher scores associated with an external locus of control, i.e. a belief that events are outside one’s control. Controlling for IQ, internals performed significantly better than externals on achievement test scores. Test-retest reliabilities for a six-week period were .67 for the 8-11 year old group (n = 98) and .75 for those in the 12-15 year old group (n = 54).

Item analysis was carried out to make a somewhat more homogenous scale of 40 items. This 40 item scale was then administered to 1,017 mostly Caucasian elementary and high school children in four different communities. The students’ responses became more internal with age.

Estimates of internal consistency via the split-half method, corrected by the Spearman-Brown formula were $r = .63$ (grades 3, 4, 5) $r = .68$ (for grades 6,7,8)
\[ r = .74 \text{ (for grades 9, 10, 11)} \] and \[ r = .81 \text{ (for grade 12)}. \]

Test-retest reliabilities sampled at the three grade levels, six weeks apart, were .63 for the third grade, .66 for the seventh grade and .71 for the tenth grade. From these results Norwicki & Strickland then identified those items working best for each grade and combined them into primary and secondary groups. The results were used to construct shorter yet reliable versions of the 40 item scale, consisting of 20 items for primary groups and 21 items for secondary groups.

5.7.2 THE VALUE OF NORWICKI & STRICKLAND'S MEASURE OF GENERALISED LOCUS OF CONTROL

Norwicki & Strickland maintained that their scale appears to be an appropriate instrument for assessing children's behaviours, with the locus of control dimension a significant variable in relation to children's behaviour. Research findings with the Norwicki & Strickland internal-external instrument indicate that children's locus of control is related to delay of gratification, self-initiated behaviour, academic achievement and self-esteem (Norwicki & Strickland, 1973).

Norwiki & Roundtree (1971) found a significant relationship between internal locus of control and higher grade point averages, but not intelligence, for 12th graders and college students. Roberts (1971) found significant correlations between internal locus of control and reading achievement for both sexes and a significant relationship between maths achievement and locus of control for maths, but not for females. He found no significant relationship between school achievement measures and locus of control for third graders but he did find significant relationships between internal scores and self-esteem as measured by the Piers-Harris and Coopersmith's scales for both males and females.
Research findings suggest that particularly for males, an internal score on the Norwicki & Strickland's (1973) measure of generalised locus of control is significantly related to academic competence, social maturity and appears to be correlated to independent striving and self-motivating behaviour.

Norwicki, in an attempt to ascertain whether internal-external beliefs can be modified, administered the Norwicki & Strickland scale to 291, 7th, 8th, and 9th grade males, predominantly black, from inner-city ghetto schools. The counsellors, as the children entered the structured camp situation, monitored the connection between their behaviour and the Norwicki & Strickland scale and ensured that reward structures were made clear. The children were significantly more internal on a readministration of the scale at the end of the camp session at the close of the week.

5.8. PEER ROSTER AND RATING SOCIOMETRIC SCALE QUESTIONNAIRE ON WORK-WITH/PLAY-WITH SCALES

Work on social interaction which eventually led to the production of peer roster and rating sociometric scales can be traced back to the research in the 1930s on race influences on peer relations (Criswell, 1937; 1939; Moreno, 1934, cited in Singleton & Asher, 1977). They used a peer nomination method in which each child named a specific number of friends, playmates or seating companions. A child's score was the number of nominations received from peers. Other studies, cited in Singleton & Asher (1977), that have employed play and work type of choice criteria are those of Bartel, Bartel & Grill (1973); Carter, DeTine, Spero & Benson (1975); Gerard, Jackson & Conolley (1975) and Teplin (1975).

Singleton & Asher (1977) assessed the nature of peer relations by using behavioural observations and sociometric measures. For the sociometric part of the study a rating
scale questionnaire was used where each child is rated by all of his or her classmates or seating companions. Two roster and rating sociometric questionnaires were used. Children were asked how much they would like to play with each other and were then asked how much they would like to work with each other. They responded to each question by rating their peers on a 0-5 point scale.

5.8.1. PEER PREFERENCE - WORK WITH / PLAY WITH - RATINGS

The work-with/play-with measure used in the current study is a sociometric instrument designed to measure what is going on in the classroom from the child's point of view. It is based on a 5-point rating scale. Each child rated who they would like to play with and then who they would like to work with on a 5-point scale depicting faces; ‘0 0 0 0 0’. Each of the eight experimental subjects was given sheets of paper with each class member's name typed on separate lines. Running across the page horizontally were the series of 5 faces ranging from frowns to smiles. A score of 5 was given to a broad smile whereas a deep frown scored 1. The scores were then summed to give an overall rating. The higher the score the more popular was the target child. A roster and rating method, used in the current study, is superior to peer nomination as no child is left out and an indication of acceptance by all class members is possible, producing more reliable scores.

Reliability

Test-retest reliability have median correlations of .82 for play-with and .84 for work with preferences (Singleton & Asher, 1977).
Peer evaluations are particularly valuable for assessing childhood adjustment. According to Pekarik, Prinz, Liebert, Weintraub & Neale (1976), interactions with peers constitute the most significant social interaction encountered by children outside of the family, with the classroom representing the work, competitive and social demands that the child will have to cope with in the future. Peer evaluations are obtained in the child’s real-life environment and are based on observations made over extended periods of time by multiple observers with whom the child has multiple relationships and who are able to view him/her from various perspectives.

Peer evaluations have various forms of validity, such as parental, clinician, and teacher ratings, as well as behavioural observation and have effectively predicted maladjustment. Peer evaluations have been shown to be stable over time, across sex of raters, and over a wide age range, and have been shown to be minimally influenced by the tendency for raters to respond with prosocial evaluations. They also fare well when compared with other means of assessing childhood adjustment and that both parent ratings and self-ratings are heavily biased by a prosocial rating as parent ratings are contaminated by parents’ tendency to systematically distort reports of unpleasant events in their children’s lives. Teacher ratings are generally considered as relatively reliable and valid assessors of children’s adjustment. However, teacher ratings combined with peer ratings are a more valid index of disturbance than teacher ratings alone. Interestingly, in direct comparisons with teacher ratings, peer ratings have been shown to be better at predicting school success (Singleton & Asher, 1977).

However, self-ratings have been found to have little relation to overt behaviour for children with emotional and behavioural difficulties (Ogier & Hornby, 1996).
Work-with/play-with scales therefore do have value for the specific reasons given above.

5.9. COOPERSMITH’S BEHAVIOUR RATING FORM

Coopersmith's Behaviour Rating Form (1967) is a pencil and paper measure designed to assess the overt self-esteem of students. It is a series of 10 questions with the adult required to check whether the statements 'always', 'usually', 'sometimes', 'seldom', or 'never' apply. Each statement is given a rating of between 1 and 5 by summing the scores and an overall measure of self-esteem is obtained. High scores on the BRF indicate high levels of overt self-esteem.

Reliability

A reliability co-efficient of 0.84 is quoted.

Validity

A validity co-efficient of 0.64 is quoted.

5.9.1. THE VALUE OF A MEASURE OF COOPERSMITH'S BEHAVIOUR RATING FORM IN MEASURING OVERT SELF-ESTEEM

The value of Coopersmith's Behaviour Rating Form as an instrument in measuring overt self-esteem is well recognised as can be seen by the number of studies using it in the literature. It can be used in a variety of situations and with a variety of ages; a form which teachers can complete fairly quickly (Gurney, 1987).

Early studies, such as that of Ammerman & Fryer (1975), reported an attempt to enhance fourth grade children's self-esteem using a photography self-portrait session for five weeks. The experimental group significantly increased their behavioural self-esteem
scores but not their verbal self-esteem scores. Similarly Altmann & Firmsz (1973) attempted to enhance self-esteem of 500 children using role play for 45 minutes over a period of ten weeks in Canadian schools. They also found increases in overt self-esteem, but not in verbal self-esteem.

Related findings were also made by Hairston & Cooper (1973) in attempting to raise the self-esteem of a group of nine to eleven year olds by the use of film making and ‘cultural experiences’ to ‘improve their ability to communicate and evaluate ideas’. They found that the experimental group improved significantly in self-esteem, but not in relation to the control group. However, what they did find was that changes occurred in the experimental group in terms of improved relationships, better self-expression, increased class attendance and positive changes in established behaviour patterns.

Findings from these three studies suggest that it is important to look for changes in behaviour as well as changes in scores on self-report measures as the former may be even more important, due to the potential for generalisation, to other situations outside of school (Gurney, 1987).

When attempting to enhance the self-esteem of a group of fourteen ‘maladjusted’ children, Gurney found a significant difference in overt self-esteem between experimental and control groups as recorded by teachers, but failed to find any differences in the other dependent variables of global and specific self-esteem, as measured by Coopersmith’s Self-esteem Inventory. He also failed to find any differences between attainments, manifest anxiety and locus of control.

According to Burns (1986) self-concept instruments rated by others (such as Coopersmith’s (1967) Behaviour Rating Form) have a definite value. In fact, Burns maintains it may therefore be presumed on logical grounds that the inferred self-concept is probably a much more accurate measure of the self-concept than the subject’s self-report.
Combs, Soper and Courson (1963, cited in Burns, 1986) maintained that there is only a slight relationship between self-report and inferred self-concepts, obtaining a mean correlation of only $+0.114$ for 18 test items. However, Burns (1986) admits that their self-report scale was created specifically for the study and no reliability and validity coefficients are reported. Also the sample was small, consisting of only 59 children. Parker (1964) also studied the differences between self-reports made by children and their self-concepts as inferred from their behaviour. His results support the earlier claims of Combs and Soper (1957, cited in Burns, 1986) as a correlation of only $+0.25$ between the two methods was found. Again, however, Burns (1986) points out that the sample size was only 30 and the rating scale was devised solely for the study and had no reported reliability or validity. Burns (1986) points out that it is difficult to know how much faith can be placed in the findings of these two studies.

Even though researchers have reported that it is easier to enhance overt self-esteem as against self-rated self-esteem, some researchers have found even enhancing overt self-esteem in children with emotional and behavioural difficulties is not as easy as some reports in the literature seem to suggest. For example, Ogier & Hornby (1996) assessed the impact of differential reinforcement on the behaviour and self-esteem of a group of children with emotional and behavioural difficulties. They found that, although it was possible to improve the behaviour of the experimental group, differential reinforcement did not positively affect teacher ratings of global or overt self-esteem. This suggests that improvements in self-esteem for children with emotional and behavioural difficulties in actual classroom situations may not be as easy as some professionals in the literature suggest.
Rutter’s Child Behaviour Questionnaire (1967) consists of 26 brief statements concerning a child’s behaviour. It is, according to Rutter, a valid short questionnaire suitable to use with children in the middle age range and can be used to discriminate between different types of behavioural or emotional disorders, as well as discriminate between children who show disorder and those who do not. High scores are an indication of high levels of emotional and behavioural difficulties.

The teacher has to check whether each statement ‘certainly applies’; ‘applies somewhat’ or ‘doesn’t apply’ to the child in question. These are given a weight of ‘2’, ‘1’ or ‘0’ respectively to produce a total score within the range 0-52 by summation of the scores of the 26 items.

A ‘neurotic’ subscore is obtained by summing the scores of items 7, 10, 17 and 23. An ‘anti-social’ subscore is obtained by summing the scores of the items 4, 5, 15, 19, 20 and 26.

A two-stage procedure is involved in discriminating between neurotic or antisocial disorders: (1) children with a total score of 9 or more are designated as showing some disorder: (2) of these children, those with a neurotic score exceeding the ‘antisocial’ score are designated ‘neurotic’, and those with an antisocial score exceeding the neurotic score are designated ‘antisocial’. The children with equal neurotic and antisocial subscores remain undifferentiated.

Rutter (1967) examined the re-test reliability, inter-rater reliability and discriminative power of the scale and found the product-moment correlation between the total score on the two occasions (with ratings made by different teachers) was +0.89, over a two month interval (40 boys and 90 girls were rated twice). The inter-rater
reliability was tested by getting four teachers to rate the same children two/three months later. The product-moment correlation between the total scores on the two occasions was + 0.72. The discriminative power of the scale was tested by comparing the scores of children in the general population with scores of the children attending psychiatric clinics for emotional or behavioural disorders. About 11% of boys and 3.5% of the girls in the general population obtained scores of 9 or more compared to about 80% of the boys and 70% of the girls in the clinical sample.

Richman (1964, cited by Rutter, 1967) reported similar findings using a slightly modified version of the scale which confirms that the scale is reliable and efficient in differentiating children with psychiatric disorder.

5.10.1. THE VALUE OF A MEASURE OF RUTTER’S B2 CHILD BEHAVIOUR QUESTIONNAIRE

According to Rutter (1967) a (psychiatric) assessment of a child requires the combination of several different approaches to the measurement of the child’s behaviour. Rutter maintained that, as a first step in the evaluation of behaviour, questionnaires have an important place, especially for screening or survey purposes. Also, there is a need for a reliable and valid short questionnaire that can be completed fairly quickly that is suitable to be used with children in the middle age range. Teachers can monitor behaviour occurring in a school situation, and this can be used to discriminate between different types of behavioural or emotional disorder, as well as discriminating between children who show disorder and those who do not. He also maintained that because of the practical importance of the child’s behaviour in school, questionnaires completed by teachers are particularly useful screening devices.

According to Rutter, although scales existed at the time, in many ways all the scales had important disadvantages (e.g. lack of diagnostic distinction within the overall
concept of maladjustment, lack of recent validation, too great a length for a teacher to complete the scale on a whole class of children, unsuitability for pre-adolescent children etc.

In the current study, two teachers rated the children's behaviour on Rutter's B2 Child Behaviour Questionnaire. However, one teacher consistently rated the children twice as badly behaved as did the other teacher. Nevertheless, both their ratings of the children were internally consistent.

5.11. EXPERIMENTAL DESIGN

TABLE 4 EXPERIMENTAL DESIGN

A summary of the experimental design is presented below in Table 5.4

<table>
<thead>
<tr>
<th>Experimental group</th>
<th>Comparison group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measures used</td>
<td>Measures used</td>
</tr>
<tr>
<td>Pre-and post-each intervention of social skills co-operative learning and PSRVS and at 4 month follow-up</td>
<td>Pre and post each of the control group interventions and at 4 month follow up</td>
</tr>
<tr>
<td>BCFSEI</td>
<td>BCFSEI</td>
</tr>
<tr>
<td>Locus of Control</td>
<td>Locus of Control</td>
</tr>
<tr>
<td>Work-with/play-with scales</td>
<td>Work-with/play-with scales</td>
</tr>
<tr>
<td>Overt behavioural self-esteem</td>
<td>Overt behavioural self-esteem</td>
</tr>
<tr>
<td>Rutter's B2</td>
<td>Rutter's B2</td>
</tr>
<tr>
<td>Free-time observations throughout the study</td>
<td></td>
</tr>
</tbody>
</table>
5.12. DATA ANALYSIS

From visual inspection of the data it was clearly unlikely that the three intervention
would produce significant differences between the experimental and comparison groups
on any of the measures shown below.

Global self-esteem; self-esteem subscales (Battle)
Locus of control (Norwicki & Strickland)
Peer nominations of work-with/play-with (Singleton & Asher)
Overt self-esteem (Coopersmith's Rating Form)
Child behaviour (Rutter's B2 Questionnaire)

Non-parametric statistical analysis of the data was carried out to confirm this.
However, the writer was well aware of the constraints of using inferential statistics with
such small numbers in both groups. This was a particular concern due to the unfortunate
effects of mortality in the experimental group where two subjects were effectively ‘lost’
from the study, leaving only 6 subjects in the experimental group and 8 subjects in the
control group.

The Null Hypothesis was that there will be no significant difference between the
experimental and control groups on global self-esteem and the self-esteem subscales,
locus of control, peer nominations of who they would like to work-with/play-with, their
overt behavioural self-esteem and overt emotional behaviour pre-and post-the three
interventions. It was further predicted that there would be a difference in the
experimental group’s behaviour, over time, in a controlled half-hour free-time session
once a week.
The observational data was tabled for each subject and a graph of the mean rates of behaviour in the controlled free-time setting was produced (Merrit & Wheldall, 1987).

5.13. **PILOT STUDY**

A small-scale pilot study was undertaken in order to examine the feasibility of undertaking the major piece of research. The pilot study was an excellent vehicle in which to experiment with various procedures mentioned below and gave the opportunity to assess the suitability of the three teachers' aides in advance of the major study. It was also an opportunity to refresh and retrain their skills where necessary. Various practical problems were identified and addressed before being implemented in the major study. These were:

- The feasibility of using the full Battle self-esteem inventory 60 item questionnaire
- The children's conceptual level required for the understanding of Battle's Culture Free Self-Esteem Inventory (CFSEI). This led to worked examples being performed on the chalkboard and the audio tape being stopped for clarification if and when necessary in the major study.
- The children's conceptual level required for the understanding of the Locus of Control Inventory. This led to worked examples being performed on the chalkboard and the audio tape being stopped for clarification if and when necessary in the major study.
- The necessity of carefully and fully explaining the requirements for obtaining rewards on a regular basis at the start of each 'lesson' in each and every intervention.
- The inter-observer reliability of adult recorders could be checked and operational definitions of targeted behaviours could be clarified and agreed.
• All staff could assess the feasibility and sustainability of each of the three separate interventions.

• The reward structure and schedules of reinforcement could be assessed, and modified where necessary.

• The disruption of the regular school timetable due to time spent on 'alternative' educational activities and the implications for extra staffing resources and the willingness of staff to co-operate in the study could be assessed.

• Opportunities to explore questions of relevance, validity, appropriateness of the research etc., could be fully explored by all staff and any fears, anxieties etc., could be aired, reassurances given where appropriate and systematically dealt with.

• Overall school staffing resources could be allocated and redistributed for the duration of the study.

• To introduce the rest of the school population, both staff and pupils, to the idea of 'alternative' methods of working that were acceptable (e.g. consumable rewards) within the wider framework of the whole school.

• The subjects in the pilot study were an opportunity sample class that were about to move up a year. They were therefore the same average as the experimental class that undertook the full investigation. This gave the ideal opportunity for the above problems to be ironed-out beforehand.

After the pilot study, the study proceeded as detailed in the following pages.
5.14 PROCEDURE

Baseline observations
A baseline of the experimental group’s behaviour was established for thirty minutes on Friday afternoons prior to any interventions taking place. In this phase, ten weekly observations of the three target behaviours (positive, negative and alone) were conducted, while the teacher continued to respond to the behaviour of the group as before. During these guided ‘free-time’ sessions the experimental group had access to a variety of materials and spent as much or as little time as they chose engaged in fun-type activities for thirty minutes. Whilst adults were present and occasionally joined in discussions, they did not organise or direct activities.

Pre-tests
Pre-tests on global and domain specific self-esteem were carried out using the BCFSEI-2 to assess whether the children did in fact have low self-esteem. These pre-tests were carried out on all 31 children in the middle school four months prior to the first intervention.

Intervention 1
The first intervention was a programme of social skills consisting of twenty-one half-hour sessions based on Junior Lifeskills by McFadden, Flynn and Bazzo (1985). Topics such as responding to adults, recognising facial expressions, interpreting body language, responding to conflict, negotiating, dealing with aggression and sharing were taught.
Intervention 2
The second intervention was a programme of co-operative learning consisting of twenty-one half-hour sessions based on fun-type puzzles. The children worked in pairs. It was explained that they would receive rewards (sweets) for co-operating with one another, not for solving the puzzles per se.

Intervention 3
The third intervention was a programme consisting of twenty-one half-hour sessions based on the children's use of overt positive self-talk. The children were encouraged to keep a diary of all positive events through the full day. They were rewarded for eliciting positive self-referent verbal statements (PSRVS).

Post-test
Immediately after each intervention all subjects were asked to complete the self-esteem inventory, locus of control questionnaire, and whom they would like to play and work with peer nominations. Teachers and care-staff were asked to rate both groups' overt self-esteem using Coopersmith's Behaviour Rating Form and rate their behaviour using Rutter's Behaviour Questionnaire.

Follow-Up
At a four-month follow-up, all subjects and staff were asked to complete follow-up measures for both the experimental and comparison groups. The measures obtained at follow-up were CFSEI, Locus of Control, Peer Preferences. Rutter's B2 and Coopersmith's Behaviour Rating Form were rated by the care-staff only as it was not possible to obtain teacher measures on these two scales.
5.15. IMPLEMENTATION OF THE THREE SEPARATE INTERVENTIONS

The author with the help of three teachers' aides carried out interventions. The author is a very experienced member of staff, having at least fourteen years' experience of working with children with emotional and behavioural problems in Bridgeview School as also have the three teachers' aides. The author and all three also had previous experience of monitoring and recording behaviour in the classroom (Ogier & Hornby, 1996) using schedules of reinforcement and time sampling of behaviour that were virtually identical to the procedures used in the current study. The author and the three teachers' aides were therefore very experienced in working with the children at the school and in the above monitoring and recording procedures. The three teachers' aides showed very high inter-observer reliability throughout the monitoring and recording of all three interventions, as they had in previously published research carried out in the school classroom.

The possibility of inadvertent potential researcher bias arising from the writer carrying out the research within his employing institution could not be ruled out, but due to the nature of the school timetable and other restrains, it was impractical to have another teacher conduct the research.

The duration and length of the interventions are well within the time frame found in most research studies and in excess of many. For example, Elias & Allen's (1991) intervention lasted 6 weeks with 22 lessons averaging 35-40 minutes each. Lewis (1994) had social skills training consisted of 5 lessons. La Greca & Santogrossi (1980) employed training of elementary school students weekly for 90 minutes over a 4 week period. Verduyn et al. (1990) had twice weekly sessions for 60 minutes over a 4 week period.
Further safeguards were built into the research parameters designed to ensure that the interventions in the current study had maximum impact on the subjects. As has been well-detailed earlier, children with emotional and behavioural difficulties are notorious for not complying with instructions both in the classroom and in the wider social sphere. Unlike most other interventions reported in the literature, the current three interventions had the distinct advantage of constant monitoring of progress by the three teachers' aides through the system of rewards for compliance. The integrity of the programme was therefore supported by the use of positive reinforcement for compliance by the use of edible reinforcers that were immediately administered upon completion of each session. Only those complying with the stated aims of each intervention received the rewards. As the edible reinforcers were a very powerful motivator, it is possible to state with a fair degree of confidence and accuracy that the subjects in the current study were extremely well motivated to actively participate in all three interventions. This can be verified by a glance at the data in the appendix on the daily records of individual compliance upon which edible reinforcers were allocated.

The first intervention was carried out by the author according to the procedures recommended in the programme of social skills based on Junior Lifestyle by McFadden, Flyn & Bazzo (1985). The intervention consisted of 30 minutes of social skills training, totalling 21 sessions over a period of 2 months. At each session a specific aspect of social interaction was addressed and followed a set predictive formula as recommended.

The second intervention consisted of 30 minutes of co-operative maths puzzles, totalling 21 sessions over a period of 2 months. The second intervention was carried out by the author based upon the work of Bierman et al., (1987) who used a series of tasks to encourage co-operative interactions. (Procedures for implementing co-operative learning in maths type tasks can be found in the literature, King, 1993; Leikin & Zaslavsky, 1997; Webb & Farivar, 1994.) Bierman et al., (1987) in their research monitored and recorded
the children's responses for ten, half-hour sessions obtaining records on whether the children were interacting in a manner that was coded as 'positive', 'negative', 'neutral' or 'alone'.

The third intervention consisted of 30 minutes of positive self-referent verbal statements, totalling 21 sessions over a period of 2 months. The third intervention was carried out by the author in a similar fashion to the procedures carried out in the work of Gurney (1987). However, his programme of positive self-referent verbal statements was in operation for 28 days in total but that included a 5 day initial baseline and a further 5 day return to baseline. The third intervention in the current study was in operation for far longer than, for example, Gurney's (1987) study.

In the current study each subject was constantly monitored and rewarded for compliance throughout the three interventions. But most significantly it took place in the actual classroom, with children who attended a school for pupils with emotional and behavioural difficulties. Therefore, the writer contends that all three interventions had a high degree of validity, as the programmes of social skills, co-operative learning experiences based on fun-type puzzles, and positive self-referent verbal statements were in operation for far longer than, for example, most studies in the literature.

5.15.1. INTERVENTION 1: IMPLEMENTATION OF SOCIAL SKILLS

Intervention 1 was a programme of social skills based on Junior Lifestyle by McFadden, Flyn & Bazzo (1985).

After discussions with teachers and care staff throughout the school, the specific topics chosen from the programme were the social behaviours most likely to benefit the children in their day-to-day encounters if executed successfully. The topics were also thought to represent the social skills that, as a group, the children lacked most. It was
hoped that mastery of these skills would significantly improve social interactions with both staff and peers on a day-to-day basis.

Topics taught were 'observing others', 'responding to adults', 'recognising facial expressions', 'interpreting body language', 'responding to conflict', 'negotiating', 'dealing with aggression' and 'sharing'.

Teachers' aides carried out behavioural observations for compliance throughout the intervention and edible reinforcers were given for compliance. Each child was rewarded for compliance on a ratio of 4:1. Immediately after each session the children received a consumable reward for compliance. Each subject in the control group was then rewarded at break-time, and given the same number of sweets as the average achieved by the children that morning in the experimental group.

Each session lasted 30 minutes, totalling 21 sessions over a period of 2 months. At each session a specific aspect of social interaction was addressed and followed a set predictive formula:

1. Introduction to the theme of the session.
2. Brief didactic period including explanation of task(s) and an opportunity to ask questions.
4. Role playing of required behaviour.
5. Feedback from group and constructive criticism.
6. Positive reinforcement of behaviour (verbal) throughout intervention.
7. Summing up and reflecting on lesson.
8. Immediate reinforcement for compliance throughout session given at end of session.
During sessions that required modelling of behaviour, the following procedures, based on structured learning techniques, were followed:

1. Introduction to the specific skill that needs to be addressed.
2. Encourage the children to talk about specific examples of the skills from their own personal experience.
3. Model situation from real life if possible as described by the child and ask ‘What do you do?’
4. Call out a pair to model the situation. Encourage feedback from the children and the teacher. Praise.
5. Go through each stage constructively, pointing out what should/should not be done. Praise.
7. Pick out good examples and observe. Praise.
8. Encourage constructive feedback from whole group. Praise.

5.15.2. INTERVENTION 2: IMPLEMENTATION OF CO-OPERATIVE LEARNING EXPERIENCES

It is important to ensure that children have acquired the necessary prerequisite social skills before any co-operation experiences are initiated. It was therefore considered appropriate to begin the second intervention of co-operative learning experiences after the sessions on social skills. The type of task assigned to the group has been shown to determine how group members interact, with, for example, some researchers using a series of well-structured mathematical tasks in which students only needed to exchange information and explanations as they worked co-operatively together. Consequently there is little need for discussion or disagreement, and students do not need to discuss
how to proceed as a group or negotiate any meaning (Malik & Furman, 1993). With the above in mind it was decided to adhere to 'low-level' co-operative tasks in order to best ensure co-operation between the pairs of subjects.

Intervention 2 was a programme of co-operative learning experiences based on fun-type puzzles. Each session lasted 30 minutes and continued for 21 sessions over the duration of 2 months.

After discussions with teachers throughout the school a series of maths-type puzzles were selected as appropriate materials from which to implement co-operative learning experiences. During each session a specific stand-alone maths-type puzzle was introduced. Each session followed a set predictable formula:

1. Introduction to the theme of the session.
2. Brief didactic period including explanation of task(s) and an opportunity to ask questions.
3. Modelling of the required behaviour by teacher and teacher’s aide.
4. Role playing of required behaviour.
5. Positive reinforcement of behaviour (verbal) throughout lesson.
6. Summing up and reflecting on lesson with brief discussion of puzzle and answer.
7. Immediate reinforcement for compliance (i.e. co-operating) throughout task, given immediately at the end of each session.

During each session the children worked in pairs and received a consumable reward for co-operating. Consumable rewards were administered for co-operating with one another, not for solving the puzzles per se. Behavioural observations for compliance were carried out by teachers’ aides during the intervention, and edible reinforcers were
given for compliance. Each child was rewarded for compliance on a ratio of 4:1. Each subject in the control group was then rewarded at break time, and given the same number of sweets as the average achieved by the child that morning in the experimental group.

5.15.3. INTERVENTION 3: IMPLEMENTATION OF POSITIVE SELF-REFERENT VERBAL STATEMENTS

Intervention 3 was a programme of Positive Self-Referent Verbal Statements (PSRVSs) uttered by each subject in a group setting, based on the work of Gurney, (1987). Each session lasted 30 minutes and continued for 21 sessions over the duration of 2 months.

During each session the children were encouraged to utter as many PSRVSs as possible when discussing their behaviour over the previous 24 hours. Children were encouraged to keep a diary of events throughout the day and were encouraged to consult members of their dormitory staff in both compiling and consulting their diaries. Children were further encouraged to bring their diaries into the morning sessions (but most did not).

The children were told only to record positive events in their diary (no matter how seemingly insignificant) and discuss only positive events in the morning sessions. Each subject was allocated 4 minutes to describe the previous 24 hours’ positive experiences. Each child in a 30 minute period was given the opportunity to utter as many PSRVSs as they wished and they were rewarded for doing so. Seven subjects took part in this intervention with each allotted 4 minutes to tell the group about their previous positive 24 hours’ experiences. The recorders made a tally and the number of PSRVSs were summed at the end of each session. The schedule of reinforcement was periodically adjusted so that the maximum number of sweets that an individual child could earn was
7.5. This was achieved by tallying the number of PSRVs for each child, then allocating the maximum as 100% i.e. 7.5.

This ensured that the number of PSRVs increased as the intervention progressed, as detailed below, and that an inordinate number of rewards for the experimental and control groups were not necessary. Each subject in the control group was then rewarded at break time, and given the same number of sweets as the average achieved by the child with the most PSRVs that morning in the experimental group.

5.16. SUMMARY

This chapter has outlined the methodology of the current study. Each measure of assessment employed has been explained in turn and its value or merit carefully examined. The results of the measures detailed above are now presented in the next chapter.
CHAPTER SIX

RESULTS

6.0. INTRODUCTION

Results address each element of the research questions in turn, commencing with the results of global self-esteem from the BCFSEI-2 for the 14 children in the experimental and comparison groups. The results of the lie scores from the BCFSEI-2 for the experimental and comparison groups are then presented. This is followed by the graphs of behavioural observations on the experimental group (only) that took place on each Friday afternoon, monitoring and recording ‘positive’, ‘negative’ and ‘alone’ social behaviours in a free-time half-hour session. The results for Locus of Control, the Peer Preferences Questionnaire, Coopersmith’s Behaviour Rating Form for overt self-esteem, and finally the results of Rutter’s B2 Behaviour Questionnaire are presented.

Both the experimental (Expt.) and comparison (Comp.) group completed all measures stated above at pre-test, after the first social skills intervention ‘1’, after the second co-operative learning intervention ‘2’, after the third intervention of PSRVSs ‘3’ and at a four-month follow-up ‘4’.
6.1. MEAN GLOBAL SELF-ESTEEM FOR THE EXPERIMENTAL AND COMPARISON GROUPS

Table 5 shows the mean global self-esteem scores (* denotes no measure taken) for the experimental and control groups in the study in relation to research question 1a on page 23. Wilcoxon Signed Rank Tests were conducted for all pupils in the experimental and control groups on each of their global self-esteem measures with each of the others (global self-esteem ‘pre-test’ with global self-esteem 1, etc.). Results show that no significant difference between the scores after each measure were found.

**TABLE 5 MEAN GLOBAL SELF-ESTEEM FOR THE EXPERIMENTAL AND COMPARISON GROUPS**

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Mann-Whitney U tests were conducted to compare the experimental with the control group on each occasion a global self-esteem measure was taken. No significant differences between the experimental and control groups on global self-esteem was found.

A mixed between-within subjects ANOVA was conducted in order to look for differences over time and between the experimental and control groups for global self-esteem 1, 2, and 3 (after the social skills intervention, the co-operative learning intervention and the positive self-referent verbal statements intervention) and at follow-up (4) where appropriate. This showed no significant difference in the way the treatments have affected the two groups.

It can be seen that the experimental group had higher global self-esteem scores at 'pre-test' (37.3 as compared to 32.25) for the control group. The experimental group’s mean scores are well within the ‘intermediate’ boundary level of global self-esteem and the control group’s mean scores are just inside the ‘low’ boundary level of self-esteem. Results of the current study therefore show nearly all of the global and/or domain self-esteem scores are on the low side of ‘intermediate’ self-esteem. It seems that the children in the current study (and remember this is before any interventions have taken place) do indeed have lower self-esteem scores than one would expect to find in the normal population, but not all of the children in the current study had low self-esteem. Indeed, very large variations in self-esteem were found between the children in the current study.
6.2. DEFENSIVENESS/LIE SCORES FOR THE EXPERIMENTAL AND COMPARISON GROUPS

Table 6 shows the mean defensive/lie scores for the experimental and control groups in the study in relation to research question 1a. (Greater the score the less defensiveness, i.e. less lying)

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Battle found that 94% of junior high subjects earned a score of 5 or better. So both groups fall just within this. However, more than a third of individuals (27% in the experimental group and 37.7% in the control group), did not earn a mean score of 5 or better throughout the duration of the intervention, (assessment - follow-up). It can be seen by visual inspection that, overall, the control group had lower scores and were therefore more defensive/lying than the experimental group. It is for the above reasons that appendix L-P examine global, general, parental, social and academic self-esteem which exclude those children from both groups with high defensive/lie scores (scores less than 5).

Figure 2 below shows the results of the behavioural observations in a free-time setting in relation to Research Question 1b on page 27.
6.3. **FIGURE 2 MEAN SCORES FOR EXPERIMENTAL GROUP (N=6) FOR BEHAVIOUR IN FREE TIME SETTINGS**

**Impact of Interventions on Positive Behaviour**

Baseline  
Social Skills  
Co-op Learning  
Positive Self-referent Verbal Statements

**Impact of Interventions on Negative Behaviour**

Baseline  
Social Skills  
Co-op Learning  
Positive Self-referent Verbal Statements

**Impact of Interventions on Alone Behaviour**

Baseline  
Social Skills  
Co-op Learning  
Positive Self-referent Verbal Statements
Figure 2 shows the behavioural observations for the experimental group on ‘positive’, ‘negative’ and ‘alone’ naturalistic behaviour on Friday afternoon free-time half-hour sessions. The observations were 25 in total, consisting of: Baseline 1-10, Social skills 11-17, Co-operative Puzzles 18-21, and PSVRS 22-25 (raw and percentage scores are shown in the appendix I and J).

The graphed results of mean positive behaviour for the three interventions demonstrate the increase in positive behaviour over the respective phases of the interventions. During the baseline observation sessions the mean percentage of time spent in positive behaviours for the group was 44.9 %. Following the intervention of social skills this had increased to 62.57%. Following the co-operative intervention positive behaviour remained above baseline levels at 54.00010. After the intervention of PSVRS positive behaviour again remained above baseline levels at 53.75%. Therefore, the three interventions continued to have a powerful effect on the children’s positive behaviour throughout the duration of the investigation.

The graphed results of mean negative behaviour for the three interventions demonstrate the decrease in negative behaviour over the respective phases of the interventions. During the baseline observation sessions, the mean percentage of time spent in negative behaviours for the group was 15.6 %. Following the intervention of social skills sessions this decreased to 12.14%. Following the co-operative intervention sessions this continued to fall to 8.75%. After the intervention of PSVRS sessions, negative behaviour continued to fall to 8.25%. Therefore, the three interventions continued to have a powerful positive effect on the children’s negative behaviour throughout the duration of the investigation.

The graphed results of mean alone behaviour for the three interventions demonstrate the decrease in alone behaviour over the respective phases of the interventions. During
the baseline period the mean percentage of time spent in alone behaviours for the group was 39.5%. Following the intervention of social skills this decreased to 25.28%. Following the intervention of the co-operative intervention this remained below baseline levels at 37.25%. After the intervention of PSRVSs, alone behaviour again remained below baseline levels at 38.00%. Therefore, the three interventions continued to have an effect on the children's alone behaviour throughout the duration of the investigation.

The children varied in their responses to the interventions. Most responded rapidly to the interventions and were observed to almost immediately alter their behaviour. However, two of the subjects found the social interaction in a free-play situation more difficult and were largely responsible for much of the inappropriate behaviour that occurred.

In order to allay any concerns regarding whether the children actively took part in the three interventions and paid sufficient attention to what was required, K in the appendix, shows the scores for 'compliance' throughout the three interventions expressed as a percentage. It shows that the mean compliance was 88.63% for the duration of the social skills intervention and 90.28% for the co-operative intervention. During the PSRVS intervention the group made on average 48.3 PSRVS for the whole of the intervention, continuing to increase with the number of sessions. (The behavioural reinforcement strategies, at the very least, did demonstrate a continuous and sustained increase in the number of positive self-referent verbal statements that occurred throughout the intervention and compliance with all three interventions.)

The results of Figure 2 above on behaviour in free-play sessions demonstrate that over the course of the three interventions, operationally defined positive behaviour increased, negative behaviour decreased and the time spent 'alone' after interventions 1 and 2 initially decreased, then returned to original baseline levels.
6.4. **LOCUS OF CONTROL AS RATED BY INDIVIDUAL CHILDREN**

(Lower scores indicate greater 'internal' control)

**TABLE 7  LOCUS OF CONTROL AS RATED BY INDIVIDUAL CHILDREN**

Table 7 shows the mean scores for global self-esteem on Norwicki & Strickland's locus of control scale for the experimental and comparison group in relation to research question 2a on page 27.

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<td>14</td>
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</table>
Although there is a trend towards lower scores in the experimental group and therefore less neurotic behaviour, particularly after the co-operative intervention, with the reverse occurring in the comparison group, results show that there is no significant difference between any of the scores pre-and post-each intervention.

6.5. PEER PREFERENCES (WORK WITH)

Table 8 shows the mean scores of ratings by their classmates on how much they would like to 'work with' them for the experimental and comparison groups in relation to research question 2b on page 27. Scores (for work with and play with in tables 8 and 9) are obtained by rating classmates on a scale of 1-5, (00000-smiley faces) with 5 being positive and 1 negative, (Higher scores the better). The experimental group could obtain a maximum of 25 (six in the group) and the control group a maximum of 35 (eight in the group, as the children couldn't rate themselves).
TABLE 8  PEER PREFERENCES (WORK WITH)

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<td>25.6</td>
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</tbody>
</table>

No significant differences were found between the experimental and control groups on 'work with' ratings shown in Table 8. By visual inspection it can be seen that over the period of the three interventions, the experimental group very slightly increased their peer preference ratings of 'work with', and this was maintained at follow-up. The control group, over the period of the three interventions, also increased their peer preference ratings of 'work with' to an even slightly greater extent. However, only the experimental group’s 'work with' ratings were maintained at follow-up.
6.6. PEER PREFERENCES (PLAY WITH)

Table 9 shows the mean scores of ratings by their classmates on how much they would like to 'play with' them for the experimental and comparison groups in relation to research question 2b.

**TABLE 9 PEER PREFERENCES (PLAY WITH)**

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<td>22.16</td>
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</table>

<table>
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</table>
No significant differences were found between the experimental and control groups on 'play with' ratings shown in Table 9. By visual inspection it can be seen that over the period of the three interventions, the experimental group very slightly increased their peer preference ratings of who they would like to 'play with', but this was not maintained at follow-up. The largest increase in ratings came after the co-operative intervention. There was, however, a drop in 'play with' ratings at follow-up.

The control group, over the period of the three interventions, also increased their peer preference ratings of 'play with' to a very slightly greater extent. Again, the experimental group's 'play with' ratings also dropped at follow-up.
### 6.7. SCORES OF OVERT SELF-ESTEEM RATED BY TEACHERS ON COOPERSMITH'S BEHAVIOUR RATING FORM

Table 10 shows the mean scores for overt self-esteem rated by teachers on Coopersmith's behaviour rating form for the experimental and comparison groups in relation to research question 2c on page 27.

#### TABLE 10 SCORES OF OVERT SELF-ESTEEM RATED BY TEACHERS ON COOPERSMITH'S BEHAVIOUR RATING FORM

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</table>

Results in Table 10 above show that there were no significant differences between the ratings of the teachers pre-and post-each intervention, therefore the three interventions had no effect on the children’s overt self-esteem as far as they could ascertain.
6.8. SCORES OF OVERT SELF-ESTEEM RATED BY CARE-STAFF ON COOPERSMITH'S BEHAVIOUR RATING FORM

Table 11 shows the mean scores for overt self-esteem rated by care staff on Coopersmith's behaviour rating form for the experimental and comparison groups in relation to research question 2c.

TABLE 11 SCORES OF OVERT SELF-ESTEEM RATED BY CARE-STAFF ON COOPERSMITH'S BEHAVIOUR RATING FORM

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<td>28.75</td>
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</tbody>
</table>

Results in Table 11 above show that there were no significant differences between the ratings of the care staff pre-and post-each intervention; therefore the three interventions had no effect on the children's overt self-esteem as far as they could ascertain.
6.9. RUTTER'S B2 BEHAVIOUR QUESTIONNAIRE COMPLETED BY

TEACHERS A score of 9 or more is indicative of neurotic/antisocial behaviour

Table 12 shows the mean scores for overt behaviour rated by two teachers on Rutter's overt behaviour rating form for the experimental and comparison group in relation to research question 2d on page 27. (Please see appendix L and M for individual teacher ratings.)

**TABLE 12 RUTTER'S B2 BEHAVIOUR QUESTIONNAIRE COMPLETED BY TEACHERS**

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<td>23</td>
<td>25</td>
<td>*</td>
</tr>
<tr>
<td>B</td>
<td>27</td>
<td>25</td>
<td>24</td>
<td>30</td>
<td>*</td>
</tr>
<tr>
<td>C</td>
<td>45</td>
<td>40</td>
<td>31</td>
<td>30</td>
<td>*</td>
</tr>
<tr>
<td>D</td>
<td>38</td>
<td>34</td>
<td>36</td>
<td>30</td>
<td>*</td>
</tr>
<tr>
<td>E</td>
<td>49</td>
<td>35</td>
<td>31</td>
<td>37</td>
<td>*</td>
</tr>
<tr>
<td>F</td>
<td>24</td>
<td>21</td>
<td>18</td>
<td>18</td>
<td>*</td>
</tr>
<tr>
<td>TOTAL</td>
<td>115</td>
<td>178</td>
<td>163</td>
<td>170</td>
<td></td>
</tr>
<tr>
<td>MEAN</td>
<td>17.91</td>
<td>14.83</td>
<td>13.58</td>
<td>14.16</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comp.</th>
<th>Pre-test</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>26</td>
<td>17</td>
<td>25</td>
<td>19</td>
<td>*</td>
</tr>
<tr>
<td>H</td>
<td>43</td>
<td>29</td>
<td>31</td>
<td>32</td>
<td>*</td>
</tr>
<tr>
<td>I</td>
<td>37</td>
<td>26</td>
<td>23</td>
<td>35</td>
<td>*</td>
</tr>
<tr>
<td>J</td>
<td>47</td>
<td>45</td>
<td>29</td>
<td>31</td>
<td>*</td>
</tr>
<tr>
<td>K</td>
<td>.12</td>
<td>12</td>
<td>12</td>
<td>7</td>
<td>*</td>
</tr>
<tr>
<td>L</td>
<td>54</td>
<td>26</td>
<td>27</td>
<td>40</td>
<td>*</td>
</tr>
<tr>
<td>M</td>
<td>39</td>
<td>26</td>
<td>35</td>
<td>34</td>
<td>*</td>
</tr>
<tr>
<td>N</td>
<td>16</td>
<td>13</td>
<td>15</td>
<td>6</td>
<td>*</td>
</tr>
<tr>
<td>TOTAL</td>
<td>274</td>
<td>196</td>
<td>19.7</td>
<td>204</td>
<td></td>
</tr>
<tr>
<td>MEAN</td>
<td>17.125</td>
<td>12.125</td>
<td>12.31</td>
<td>12.75</td>
<td></td>
</tr>
</tbody>
</table>
Results in Table 12 above show that there were no significant differences between the ratings of the teachers pre-and post-each intervention, therefore the three interventions had no effect on the children's overt behaviour as far as the teachers could ascertain. By visual inspection it can be seen that, although the experimental group behaved better as the intervention progressed, the control group behaved even better still. A possible reason for these mixed and ultimately equivocal findings is that Bridgeview School's inherent regime of positive reinforcement strategies itself swamped any of the positive behaviour changes picked up by Rutter's B2 Behaviour Questionnaire findings.
6.10. **RUTTER'S B2 BEHAVIOUR QUESTIONNAIRE COMPLETED BY CARE-STAFF**

A score of 9 or more is indicative of neurotic/antisocial behaviour.

**TABLE 13 RUTTER'S B2 BEHAVIOUR QUESTIONNAIRE COMPLETED BY CARE-STAFF**

Table 13 shows the mean scores for behaviour as rated by care staff on Rutter's behaviour rating form for the experimental and comparison groups in relation to research question 2d.

<table>
<thead>
<tr>
<th>Expt.</th>
<th>Pre-test</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>21</td>
<td>17</td>
<td>8</td>
<td>19</td>
<td>8</td>
</tr>
<tr>
<td>B</td>
<td>10</td>
<td>13</td>
<td>13</td>
<td>17</td>
<td>22</td>
</tr>
<tr>
<td>C</td>
<td>17</td>
<td>15</td>
<td>15</td>
<td>18</td>
<td>11</td>
</tr>
<tr>
<td>D</td>
<td>24</td>
<td>23</td>
<td>21</td>
<td>22</td>
<td>28</td>
</tr>
<tr>
<td>E</td>
<td>28</td>
<td>27</td>
<td>24</td>
<td>25</td>
<td>20</td>
</tr>
<tr>
<td>F</td>
<td>11</td>
<td>13</td>
<td>13</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>111</td>
<td>108</td>
<td>94</td>
<td>105</td>
<td>108</td>
</tr>
<tr>
<td><strong>MEAN</strong></td>
<td>18.5</td>
<td>18.0</td>
<td>15.6</td>
<td>17.5</td>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comp.</th>
<th>Pre-test</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>19</td>
<td>8</td>
<td>16</td>
<td>9</td>
<td>*</td>
</tr>
<tr>
<td>H</td>
<td>33</td>
<td>23</td>
<td>29</td>
<td>23</td>
<td>13</td>
</tr>
<tr>
<td>I</td>
<td>21</td>
<td>26</td>
<td>14</td>
<td>21</td>
<td>*</td>
</tr>
<tr>
<td>J</td>
<td>.12</td>
<td>12</td>
<td>11</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>K</td>
<td>5</td>
<td>8</td>
<td>14</td>
<td>17</td>
<td>6</td>
</tr>
<tr>
<td>L</td>
<td>21</td>
<td>32</td>
<td>26</td>
<td>22</td>
<td>16</td>
</tr>
<tr>
<td>M</td>
<td>11</td>
<td>17</td>
<td>13</td>
<td>13</td>
<td>20</td>
</tr>
<tr>
<td>N</td>
<td>8</td>
<td>11</td>
<td>5</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>130</td>
<td>137</td>
<td>128</td>
<td>134</td>
<td>85</td>
</tr>
<tr>
<td><strong>MEAN</strong></td>
<td>16.25</td>
<td>17.125</td>
<td>16.0</td>
<td>16.75</td>
<td>14.1</td>
</tr>
</tbody>
</table>
Results in Table 13 above show that there were no significant differences between the ratings of the care staff pre-and post-each intervention; therefore the three interventions had no effect on the children’s overt behaviour as far as they could ascertain.
6.11. SUMMARY OF STATISTICALLY SIGNIFICANT EFFECTS

TABLE 14 SUMMARY OF STATISTICALLY SIGNIFICANT EFFECTS FROM MULTIVARIATE ANALYSIS (MIXED BETWEEN-WITHIN ANOVA)

Table 14 shows the statistically significant differences for time in the experimental group. However, on all occasions there was no difference between the two groups.

Multivariate Tests Design.

Global self-esteem: Intercept+GROUP Within Subjects Design: TIME

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
<th>Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIME</td>
<td>.281</td>
<td>4.475</td>
<td>4.000</td>
<td>7.000</td>
<td>.041</td>
<td>.719</td>
</tr>
<tr>
<td>TIME * GROUP</td>
<td>.595</td>
<td>1.191</td>
<td>4.000</td>
<td>7.000</td>
<td>.393</td>
<td>.405</td>
</tr>
</tbody>
</table>

Rutter's B2 Niki: Intercept+GROUP Within Subjects Design: TIME

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
<th>Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIME</td>
<td>.246</td>
<td>10.21 4</td>
<td>3.000</td>
<td>10.000</td>
<td>.002</td>
<td>.754</td>
</tr>
<tr>
<td>TIME * GROUP</td>
<td>.921</td>
<td>.285</td>
<td>3.000</td>
<td>10.000</td>
<td>.835</td>
<td>.079</td>
</tr>
</tbody>
</table>

Rutter's B2 Pete: Intercept+GROUP Within Subjects Design: TIME

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
<th>Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIME</td>
<td>.299</td>
<td>7.826</td>
<td>3.000</td>
<td>10.000</td>
<td>.006</td>
<td>.701</td>
</tr>
<tr>
<td>TIME * GROUP</td>
<td>.822</td>
<td>.724</td>
<td>3.000</td>
<td>10.000</td>
<td>.560</td>
<td>.178</td>
</tr>
</tbody>
</table>

Rutter's B2 Pete and Niki Combined: Intercept+GROUP Within Subjects Design: TIME

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
<th>Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIME</td>
<td>.234</td>
<td>10.929</td>
<td>3.000</td>
<td>10.000</td>
<td>.002</td>
<td>.766</td>
</tr>
<tr>
<td>TIME * GROUP</td>
<td>.874</td>
<td>.479</td>
<td>3.000</td>
<td>10.000</td>
<td>.704</td>
<td>.126</td>
</tr>
</tbody>
</table>
Coopersmith’s BRF Niki: Intercept+GROUP Within Subjects Design:
TIME

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
<th>Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIME</td>
<td>Wilks' Lambda</td>
<td>.196</td>
<td>13.663</td>
<td>3.000</td>
<td>.001</td>
<td>.804</td>
</tr>
<tr>
<td>TIME*</td>
<td>Wilks' Lambda</td>
<td>.730</td>
<td>1.232</td>
<td>3.000</td>
<td>.349</td>
<td>.270</td>
</tr>
<tr>
<td>GROUP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 15  SUMMARY OF STATISTICALLY SIGNIFICANT EFFECTS FROM NON-PARAMETRIC ANALYSIS (WILCOXON SIGNED RANK TEST)

<table>
<thead>
<tr>
<th>Measure Wilcoxon Signed Rank Test</th>
<th>Experimental Group Sig. (2 tailed)</th>
<th>Comparison Group Sig. (2 tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>academic self-esteem four-academic self-esteem three (a s/e fell)</td>
<td>$Z = -2.232$ .026</td>
<td>$Z = .000$ 1.000</td>
</tr>
<tr>
<td>rutter's B2 Niki time two -pretest</td>
<td>$Z = -2.214$ .027</td>
<td>$Z = -2.371$ .018</td>
</tr>
<tr>
<td>rutter's B2 Niki time three-pretest</td>
<td>$Z = -2.207$ .027</td>
<td>$Z = -2.383$ .017</td>
</tr>
<tr>
<td>rutter's B2 Niki time two –time one</td>
<td>$Z = -2.060$ .039</td>
<td>$Z = -2.375$ .018</td>
</tr>
<tr>
<td>rutter's B2 Pete time one -pretest</td>
<td>$Z = -2.207$ .027</td>
<td>$Z = -2.375$ .018</td>
</tr>
<tr>
<td>rutter's B2 Pete and Niki combined time one -pretest</td>
<td>$Z = -2.201$ .028</td>
<td>$Z = -2.366$ .018</td>
</tr>
<tr>
<td>rutter's B2 Pete and Niki combined time two –pretest</td>
<td>$Z = -2.201$ .028</td>
<td>$Z = -2.371$ .018</td>
</tr>
<tr>
<td>rutter's B2 Pete and Niki combined time three-pretest</td>
<td>$Z = -1.992$ .046</td>
<td>$Z = -2.524$ .012</td>
</tr>
<tr>
<td>rutter's B2 Pete pretest – Niki pretest</td>
<td>$Z = -2.207$ .027</td>
<td>$Z = -2.524$ .012</td>
</tr>
<tr>
<td>rutter's B2 Pete time one Niki time one</td>
<td>$Z = -2.207$ .027</td>
<td>$Z = -2.533$ .011</td>
</tr>
<tr>
<td>rutter's B2 Pete time two Niki time two</td>
<td>$Z = -2.207$ .027</td>
<td>$Z = -2.524$ .012</td>
</tr>
<tr>
<td>rutter's B2 Pete time three Niki time three</td>
<td>$Z = -2.207$ .027</td>
<td>$Z = -2.533$ .011</td>
</tr>
</tbody>
</table>
Repeated measures analysis for both the experimental and comparison groups showed no difference between the two groups over time.

**TABLE 16 SUMMARY OF STATISTICALLY SIGNIFICANT EFFECTS FROM NON-PARAMETRIC ANALYSIS (MANN-WHITNEY U TEST)**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Non-parametric Mann Whitney U</th>
<th>(2 tailed)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>general self-esteem pretest</td>
<td>Z = -2.140</td>
<td>.032</td>
<td></td>
</tr>
<tr>
<td>general self-esteem time one</td>
<td>Z = -2.140</td>
<td>.032</td>
<td></td>
</tr>
<tr>
<td>locus of control time one</td>
<td>Z = -2.813</td>
<td>.005</td>
<td></td>
</tr>
<tr>
<td>locus of control time two</td>
<td>Z = -2.986</td>
<td>.003</td>
<td></td>
</tr>
<tr>
<td>work-with pre-test</td>
<td>Z = -2.277</td>
<td>.023</td>
<td></td>
</tr>
<tr>
<td>work-with time one</td>
<td>Z = -2.084</td>
<td>.037</td>
<td></td>
</tr>
</tbody>
</table>

The above table shows the statistically significant differences between the experimental and comparison groups.
6.12. INDIVIDUAL TRACKING

In order to obtain a more ‘rounded picture’ of the possible effects of the three interventions, selected children were ‘tracked’ and their progress is detailed below.

Individual tracking of child ‘A’:

Child ‘A’ had ‘intermediate’ global self-esteem (37) at pre-test. This continued throughout the three interventions, but at the four-month follow-up his global self-esteem score had actually dropped to ‘low’ (31).

Unfortunately, his lie/defensiveness scores on the BCFSEI varied widely throughout the interventions, scoring from 0 (maximum amount of lying) to 7, quite truthful.

At pre-test, his locus of control score was slightly high (12) compared to the rest of the experimental group (10), indicating that he had a slightly ‘internal’ orientation. (Norwiki & Strickland obtained a mean of 13.81 for grade nine pupils.) His scores continued to be higher than the mean for the group throughout the duration of the three interventions, particularly after intervention 3 when he scored 16, indicating that, at the time immediately after this intervention, he was exhibiting a more ‘external’ behaviour pattern. However, at the four-month follow-up his score dropped back to its original level.

His ‘work-with’ scores (20) were just above the mean for the group (20) at pre-test, but dropped after the first intervention, and remained so till follow-up (17). This suggests that the three interventions could in fact have had a negative effect on his perception of who he would like to work-with.
His 'play-with' scores (19) were just above the mean for the group (20) at pre-test. They continued to rise slightly after the first and second interventions, but then fell after intervention three and at follow-up to 17.

Overt self-esteem scores for child ‘A’ (32.5) as measured by teachers on the CBRF, was rated as higher than the combined mean for the group at pre-test (28.3), and increased to 34 after intervention 2. Unfortunately, after intervention 3, this dropped to 27, which was below the mean for the group.

Similarly, overt self-esteem for child ‘A’ as measured by care-staff on the CBRF, was rated as higher than the mean for the group at pre-test. His scores remained higher than the mean throughout the three interventions and at follow-up, apart from a ‘blip’ after intervention 3.

Overt behaviour scores for child ‘A’ as measured by the teachers on Rutter’s B2, were slightly lower than the mean for the group at pre-test, indicating that he was generally ‘better’ behaved in the School environment. His scores continued to be lower than the mean throughout the three interventions.

However, overt behaviour scores for child ‘A’ as measured by the care-staff on Rutter’s B2, were slightly higher than the mean for the group at pre-test, indicating that he was generally ‘worse’ behaved in the dormitory environment as compared to his peers. There was an improvement in his score after intervention 1 and a substantial improvement after intervention 2. (It was less than 9, which is not considered to be indicative of neurotic/antisocial behaviour.) Unfortunately, his score was elevated again after intervention 3, to above the mean for the group. However, it did fall substantially again at follow-up to 8, indicating that the interventions may have had a positive effect on his behaviour.
Individual tracking of child ‘C’:

Child ‘C’ also had ‘intermediate’ global self-esteem (37) at pre-test. His global self-esteem continued to be ‘intermediate’ throughout the three interventions, but at the four month follow-up his global self-esteem score, although still ‘intermediate’, had increased to 42, just short of 44 which constitutes ‘high’ self-esteem.

Unfortunately, his lie/defensiveness scores on the BCFSEI varied widely throughout the interventions, scoring from 4 (very defensive/lying) to 10, completely truthful.

At pre-test, his locus of control score was slightly low (9) compared to the rest of the experimental group indicating that he had an ‘internal’ orientation. It continued to drop throughout the duration of the three interventions, apart from after intervention 2 when it rose slightly. At the four-month follow-up it dropped right down to 3, indicating that the three interventions may have had a significant effect on his locus of control.

His ‘work-with’ scores (17) were below the mean for the group (19) at pre-test, but dropped after the first intervention and remained so till follow-up. This suggests that the three interventions could in fact have had a negative effect on his perception of who he would like to work-with.

His ‘play-with’ scores (23) were above the mean for the group (20) at pre-test. They remained constant after the first intervention then rose slightly after interventions two and three, but then fell at follow-up to 17.

Overt self-esteem scores (27) for child ‘C’ as measured by teachers on the CBRF, was rated as slightly lower than that for the combined mean of the group at pre-test (28.83). His scores increased steadily throughout the duration of the
interventions, with a score of 32 at the end of intervention 3, which was above the mean for the group.

Overt self-esteem for child ‘C’ as measured by care-staff on the CBRF, was rated as higher than the mean for the group at pre-test, and although dropping slightly, scores remained above the mean for the group even after the four month follow-up.

Overt behaviour scores for child ‘C’ as measured by the teachers on Rutter’s B2, were higher than the mean for the group at pre-test, indicating that he was generally ‘worse’ behaved than his peers in the School environment. His scores continued to be higher than the mean throughout the three interventions, but continued to fall until after intervention 3 where they were almost at the group mean. This could indicate that the interventions for Michael may have positively impacted on his behaviour.

However, overt behaviour scores for child ‘C’ as measured by the care-staff on Rutter’s B2, were slightly lower than the mean for the group at pre-test, indicating that he was generally ‘better’ behaved in the dormitory environment. His scores then changed to lower than the group mean after interventions 1 and 2. It rose again after intervention 3, but as with child ‘A’ there was a substantial improvement in his score at follow-up, indicating that the interventions may have had a positive effect on his behaviour.
Individual tracking of child E:

Child ‘E’ had ‘intermediate’ global self-esteem (38) at pre-test. This continued throughout the three interventions, but at the four month follow-up his global self-esteem score had actually risen to 44 which constitutes ‘high’ self-esteem.

Child ‘E’ obtained lie/defensiveness scores on the BCFSEI of between 5, which are just within the normal range, to 8, quite truthful.

At pre-test, his locus of control score was very low compared to the rest of the experimental group (5) indicating that he had a very ‘internal’ orientation. His score doubled after the first intervention and then gradually dropped to pre-test level after intervention 3. At the four month follow-up it rose slightly again to a score of 8 indicating that the three interventions may have in fact had an ‘externalising’ effect on his locus of control.

His ‘work-with’ scores (21) were just above the mean for the group (19) at pre-test, but dropped very slightly after the first intervention and remained so till after the third intervention. This suggests that the three interventions could have had a negative effect on his perception of who he would like to work-with. Unfortunately, no follow-up results were available.

His ‘play-with’ scores (24) were well above the mean for the group (20) at pre-test. They fell after the first intervention and remained constant until after the three interventions. No follow-up was possible.

Overt self-esteem for child ‘E’ (22.5) as measured by teachers on the CBRF, was rated as lower than the mean for the group at pre-test (28.3). Although this remained so throughout all three interventions, scores did increase. This indicated that his overt self-esteem might have been positively effected by the interventions even though it never reached mean group levels at any point.
Similarly, overt self-esteem for child ‘E’ as measured by care-staff on the CBRF, was rated as much lower than the mean for the group at pre-test. This continued to remain at the same low level throughout all 3 interventions and at follow-up.

Overt behaviour scores for child ‘E’ as measured by the teachers on Rutter’s B2, were much higher than the mean for the group at pre-test, indicating that he was generally ‘worse’ behaved compared to his peers in the School environment. His scores continued to be higher than the mean throughout the three interventions, but did fall substantially after interventions 1 and 2. After intervention 3, although experiencing a slight hike, his score was still substantially below that at pre-test, indicating that the interventions may have had a positive effect on his behaviour.

However, overt behaviour scores for child ‘E’ as measured by the care-staff on Rutter’s B2, were higher (28) than the mean for the group (18) at pre-test, indicating that he was generally ‘worse’ behaved in the dormitory environment. His scores remained much higher than the mean throughout the three interventions. However, his score had dropped to near the mean at follow-up indicating that the interventions may have had a positive effect on his behaviour.
Individual tracking of child F:

Child ‘F’ had ‘intermediate’ global self-esteem (36) at pre-test. He continued to obtain ‘intermediate’ scores throughout the three interventions. At the four-month follow-up his score was back to 36.

His lie/defensiveness scores on the BCFSEI were 10 at pre-test and immediately after each of the three interventions, indicating that he was completely non-defensive and truthful. He only dropped one point at the four-month follow-up to obtain a score of 9.

At pre-test, his locus of control score was higher (13) than the rest of the experimental group putting him on the border of an ‘external/internal’ orientation. His scores dropped slightly throughout the duration of the three interventions, and at the four month follow-up it remained lower than at pre-test (11), indicating that the three interventions may have had a slightly ‘internalising’ effect on his locus of control.

His ‘work-with’ scores (17) were below the mean for the group (19) at pre-test, but varied throughout the interventions dropping at the four month follow-up (16). This suggests that the three interventions could have had a negative effect on his perception of who he would like to work-with.

His ‘play-with’ scores were the mean for the group at pre-test. They rose slightly after the first intervention, but then fell after intervention three and at follow-up.

Overt self-esteem for child ‘F’ (35.5) as measured by teachers on the CBRF, was rated as substantially higher than the mean for the group (28.3) at pre-test. His scores remained virtually unchanged after intervention 1, but increased after intervention 2. However, by the end of intervention 3 it had dropped again below the pre-test score, but still above group mean.
Overt self-esteem for child 'F' as measured by care-staff on the CBRF, was rated as slightly higher than the mean for the group at pre-test. However, there was a large increase after intervention 3, but by follow-up it had returned to the group mean.

Overt behaviour scores for child 'F' as measured by the teachers on Rutter's B2, were lower than the mean for the group at pre-test, indicating that he was generally 'better' behaved in the School environment as compared to his peers. His scores continued to fall and were lower than the mean throughout the three interventions. This could indicate that his behaviour, even though 'good' initially, continued to improve as a result of the 3 interventions.

However, overt behaviour scores for child 'F' as measured by the care-staff on Rutter's B2, were much lower (11) than the mean for the group (18) at pre-test, indicating that he was generally 'better' behaved in the dormitory environment. His scores then remained substantially lower than the mean throughout the three interventions, dropping to only 4 after intervention 3. Unfortunately, his score jumped to 19 at follow-up, suggesting a problem with generalisation for child F.

A discussion of the results reported in this chapter, in relation to the existing literature on the self-esteem, affective variables and behaviour of children with emotional and behavioural difficulties, is presented in the following chapters.
CHAPTER 7

DISCUSSION

7.0. OVERVIEW

In this chapter findings from the current study are discussed in relation to the two research questions and the issues of measurement that pervade the whole study in the light of previous research found in the literature on children with emotional and behavioural difficulties.

In relation to research question one, we commence with a discussion of the impact of the three interventions, in turn, on the self-esteem of the children, followed by the results of the behavioural observations in the free-time sessions. In relation to research question two, we discuss the results of the impact of the three interventions, in turn, on the other affective variables of locus of control, self-rated peer relations, overt self-esteem and overt behaviour.

We then turn our attention to the influence of measurement issues that have pervaded the whole study, and discuss the levels of self-esteem found for the children at Bridgeview School. We compare the results of the current study with those found in the literature regarding how self-esteem is seen as a mediating variable in behavioural improvement. This is followed by a brief discussion of the relationship between self-esteem of children with emotional and behavioural difficulties and other special needs. A discussion of the equivocal results of self-esteem found in the study and the possible reasons for the virtual reversal of the self-esteem scores between assessment and pre-test for the whole middle school follows. Positive illusory bias or false self is then
discussed. The need for multiple measures of assessment with children with emotional and behavioural difficulties is followed by explanations for the negative tenor of the results and implications for practitioners. Finally, weaknesses of the current study and possible areas for future research are presented.

7.1. FINDINGS REGARDING RESEARCH QUESTION ONE

The aim of the current study was to improve self-esteem, reduce inappropriate behaviour and improve other affective variables for a group of children with emotional and behavioural difficulties through three interventions of social skills, co-operative learning and self-talk. The current study seeks to build on previous research by Ogier and Hornby (1996) that investigated the impact of differential reinforcement on the behaviour and self-esteem of children with emotional and behavioural difficulties using a multiple baseline design. We found that levels of inappropriate behaviour were substantially reduced, but that both the self-report ratings of self-esteem and teacher ratings of overt self-esteem indicated that the children's self-esteem did not show significant change in conjunction with the observed behavioural change.

7.1.1. THE IMPACT OF THE SOCIAL SKILLS INTERVENTION ON SELF-ESTEEM

In the current study, regarding research question 1a, it was found that the social skills intervention did not significantly enhance the experimental group's global self-esteem (or general, parental, social and academic self-esteem), as can be seen in the appendix. Therefore the results of the current study of children with emotional and behavioural difficulties are not commensurate with the assertion, commonly found in the literature, that social skills interventions can significantly enhance self-esteem.
However, as noted in the earlier section dealing with the problems of measurement, the current study presented previous research in the literature which shows that mixed results are obtained in studies attempting to measure the impact of social skills interventions on children who are 'normal', have 'special needs' or 'emotional and behavioural difficulties'. For example, equivocal research evidence for the efficacy of social skills programmes for children with emotional and behavioural difficulties has been found by Schneider (1992) in his meta-analysis of 79 studies and Schneider & Leroux (1994) in their review of 25 studies.

Research studies in the literature have found that social skills interventions do enhance self-esteem for children with emotional and behavioural difficulties. For example, O'Dell, Rak, Chermonte & Hamlin (1994) examined 18 'at risk' 3rd and 4th graders and found that self-concept, as measured by the Piers Harris Self Esteem Inventory improved. However, the question arises whether O'Dell's populations of 'at risk' were the same as in the current study, and whether using the Piers Harris Self Esteem Inventory as against the BCFSEI-2 made a difference? These concerns are explored more fully in chapter 4 on measurement issues.

Other researchers have found that social skills interventions produce mixed results in attempting to enhance self-esteem for children with 'emotional and behavioural difficulties'.

Poirier (1991), in an attempt to improve social skills in 13 'emotionally handicapped' middle school boys, found the results of the 8 months' multifaceted programme improved only one of the two measures of self-esteem (Coopersmith's and Coopersmith/Gilbert Behavioural Academic Self-esteem). The results of the current study do not support these findings as no statistically significant increase in overt, global or domain specific self-esteem, after any of the three interventions, including follow-up, was found. Poirier's (1991) results are extremely interesting and directly
relate to the points made above. It is very illuminating that one self-esteem inventory gave positive results whereas another did not. Again we may have definitional anomalies regarding children who are ‘emotionally and behaviourally disturbed’ between the two studies. Were Poirier’s subjects, who were described as ‘emotionally handicapped’ equivalent to the subjects in the current study?

Wright (1996), studying ‘conduct disordered’ boys in residential treatment, implemented a cognitive behavioural social skills training programme with preadolescents (diagnosed as ADHD and or/learning disability), and found consistent improvement in social skill competency, and significant positive changes in self-esteem and self-control. She also found potential long-term benefits at a twelve month follow-up. The results of the current study do not support these findings.

However, some research studies in the literature have found that social skills interventions do not significantly enhance self-esteem (Valliant, Jensen & Raven-Brook, 1995). Valliant et al. (1995) examined the effectiveness of cognitive behavioural therapy and social skills training on 39, 16-18 year olds; 25 were in custody, 5 were on probation and 10 were enrolled in secondary schools in Canada. They found that the mean scores pre-and post-test results of intelligence, self-perception and hostility and self-esteem as measured by Coopersmith’s self-esteem inventory after cognitive behaviour therapy and social skills training were not significantly different for the three groups. The results of the current study therefore, give very tentative support to Valliant, Jensen & Raven-Brook’s (1995) results.

Another possible explanation for the results found in the current study can be found in the literature that expounds on problems that social skills intervention programmes are prone to, for ‘normal’ and ‘special needs’ children, and particularly for those with emotional and behavioural difficulties. For example, Beelman et al. (1994) found, in their meta-analysis of 49 studies between 1981 and 1990, that social skills interventions
were in fact only of limited success. Kavale & Forness (1995) found in their meta-
analysis that social skills interventions did not transfer to out-of-school situations.
Frankel & Myatt (1996) maintained that in fact we know very little about the
relationship between children's reported self-esteem and their behaviour from
investigating 59 'non-psychotic', 7-12 year olds in a social skills programme. McIntosh,
Vaughn & Zaragoza (1991), in a literature review, maintained that it is practically
impossible to conclusively demonstrate the efficacy of social skills training
programmes due to lack of control groups in most of the published studies. A meta-
analysis by Schneider (1992) found that social skills training programmes may be
effective, but differences in the measurement of change or in the populations being
targeted can cause problems.

Therefore, because of the weak effect of the borderline increase in some domain
specific self-esteem scores found in the current study and the limited amount of
supporting research evidence on children with 'emotional and behavioural difficulties',
it is considered that the confidence in the saliency and validity of this assertion is in fact
difficult to justify. Unfortunately, the small numbers in the current study affect the
generalisability of the findings to the wider literature.

7.1.2. THE IMPACT OF THE CO-OPERATIVE INTERVENTION ON SELF-ESTEEM

In the current study, regarding to research question 1a, it was found that the co-
operative intervention did not significantly enhance the experimental group's global (or
general, parental, social and academic self-esteem), as can be seen in the appendix.
Therefore, the results of the current study of children with emotional and behavioural
difficulties are not commensurate with the assertion, commonly found in the literature,
that co-operative interventions enhance self-esteem.
As noted in the earlier section dealing with the problems of measurement, the current study presented previous research evidence from the literature which shows that results are overwhelmingly positive for co-operative interventions. For example, Johnson, Maruyama, Johnson, Nelson & Skon (1981) found in their meta-analysis of 122 studies from 1924 to 1981 that students in co-operative programmes performed in the 80th percentile academically compared with children in traditional academic situations. In their more recent meta-analysis of 64 studies, Stanne et al., (1999) also found in favour of co-operative interventions. However, some mixed results are obtained in studies attempting to measure the impact of co-operative interventions on children. Particular caution has been urged concerning students with special needs and especially those with emotional and behavioural problems (Pomplun, 1997).

Positive results for self-esteem enhancement for children with special needs have been found in the literature (Stanne et al., 1999). However, problems in co-operative contingencies with children who have ‘special needs’ have also been found. Some researchers have posited that students with special needs may need instructional adaptations during co-operative learning, as they do not possess the academic or collaborative skills to partake in co-operative activities unaided (Bryant & Bryant, 1998). (In order to overcome the above problems, the current study employed behavioural contingencies of ‘compliance’ to ensure co-operation as seen in the appendix.)

Siperstein & Leffert (1999) found that self-reported levels of sharing in children with special needs was totally different to their actual behaviour. King (1993) found the low achievers were frequently passive and lacked interest in the proceedings and they made fewer contributions to the group. Gilles & Ashman (1998) maintained that studies attempting to identify the variables that mediate the relationship between co-operative group experiences and learning outcomes are again very few in number. The author has
found that studies attempting to identify the variables that mediate the relationship between co-operative group experiences and affective outcomes, especially self-esteem, in children with emotional and behavioural difficulties, are even more rare.

Stanne et al., (1999), in a recent analysis of 800 'Social Interdependence' studies on motor skills performance, found that for all comparisons, co-operation resulted in greater interpersonal attraction, social support and self-esteem. However, of the 64 studies located for their meta-analysis only 10 studies included self-esteem as an independent variable, and only one focused on emotionally and behaviourally disturbed children (Fahl, 1970, American Journal of Occupational Therapy). This mirrors Carpenter & Apter's (1987) remark that co-operative learning research is not a subject addressed (then), for example, in any contemporary behavioural disorders text.

Although the DFEE Circular 9/94 blithely extols practitioners to encourage co-operative learning with pupils with emotional and behavioural difficulties in order to enhance their self-esteem, no evidence is provided. For example, DFEE Circular 9/94 maintains 'there is a positive association between pupils' involvement and greater motivation on, and feeling of, self-worth on their part. Pupils should be encouraged... to work co-operatively with their peers' (p.13).

Townsend, Moore, Tuck & Wilton (1998) 'postulated' that co-operative learning can benefit children with emotional and behavioural difficulties, and increase self-esteem, based on reviews by Totten et al., (1991). These have shown co-operative learning to benefit children in a range of cognitive, social and affective factors, suggesting that co-operative learning is effective in increasing self-esteem and feelings of competence.

However, some caveats have been illuminated by researchers who maintain that not all co-operative learning interactions are equally effective for achieving particular goals for all students and teachers, and some strategies may be more effective than
others (Walker & Crogan, 1998). Margolis (1990) maintains ‘co-operative strategies are more effective with teachers who see a need for it and want to try it, than with those who do not’ (p.314). For example, Pomplun (1991) found that in co-operative learning situations, children with emotional and behavioural difficulties may not behave or respond in the same fashion as their normal or special needs counterparts. They did not interact like the other groups; there was less participation and less listening, more speaking when others spoke, more interrupting, and more ignoring of others.

The earlier literature review on co-operative interventions positively impacting on the self-esteem of children who are emotionally and behaviourally disturbed, shows the difficulty of obtaining studies that go beyond simple generalisations, such as ‘improves’, ‘promotes’, ‘fosters’, ‘benefits’ etc. If one includes research carried out in actual classrooms, in residential special schools, with children who have emotional and behavioural difficulties, the writer could find no statistically significant findings of self-reported, self-esteem enhancement. Therefore, there is a widespread impression, but little evidence in the literature, that self-esteem can be enhanced through co-operative learning in children with emotional and behavioural difficulties, and it is possible to overstate the agreement in this area. Unfortunately, the small numbers in the current study affect the generalisability of the findings to the wider literature.

7.1.3. THE IMPACT OF THE COGNITIVE BEHAVIOURAL INTERVENTION (PSRVS) ON SELF-ESTEEM

In the current study, regarding to research question 1a, it was found that the cognitive behavioural intervention of positive self-referent verbal behaviour did not enhance the experimental group’s global (or general, parental, social and academic) self-esteem, as can be seen in the appendix. Therefore the results of the current study of children with
emotional and behavioural difficulties are not commensurate with the assertion, commonly found in the literature, that cognitive behavioural interventions enhance self-esteem.

As noted in the earlier section dealing with the problems of measurement, the current study presented previous research in the literature that shows mixed results are obtained in studies attempting to measure the impact of cognitive behavioural interventions on children who are 'normal', have 'special needs' or 'emotional and behavioural difficulties'.

Positive results for enhancing self-esteem for children with 'special needs' using positive self-referent verbal statements can be found in the literature (Danzig, 1977; Hauserman, Miller & Bond, 1976; Krop, Calhoon & Verrier, 1971; Maag & Behreus, 1989b; Parker, 1964; Philips, 1975; Rose, 1978). Unfortunately the variety of 'special need' differences in age and 'disability' as well as self-esteem measures has made generalisation difficult.

Some of the above research findings were equivocal. Douglas, Parry, Marton & Garson (1976), when training boys with 'hyperactivity' found the training group showing significantly greater improvement on several post-test and follow-up measures, but not on a teacher rating scale.

Other researchers found no difference in self-esteem in their studies using self-statements. For example, Valliant, Jensen & Raven-Brook (1995) examined the effectiveness of cognitive behaviour therapy and social skills training on 39 subjects, aged 16 to 28. 24 were in open custody, 5 were on probation and 10 were enrolled in secondary school in Canada. They found that the mean scores pre-and-post test results of intelligence, self-perception and hostility and self-esteem, as measured by Coopersmith's self-esteem inventory after cognitive behaviour therapy and social skills training, were not significantly different for the three groups. The results of the current
study therefore lend very tentative support to the work of Valliant et al. (1995), but due to the weak effect of the borderline 'intermediate/low' self-esteem scores found in the current study, the limited amount of supporting research evidence and that this effect was found with children with emotional and behavioural difficulties, it is considered that the confidence in the validity of the above assertion is in fact difficult to justify.

Positive results for enhancing self-esteem for children with 'emotional and behavioural difficulties' using positive self-referent verbal statements can be found in the literature (Gurney, 1981, 1987a, 1987b, 1987c). He worked with 14 'maladjusted' boys aged 10 to 12 old over a six-week period and found that a substantial increase in positive self-referent verbal statements was associated with an increase in self-esteem in both verbal self-report and behaviour. Nevertheless, the control group also improved in verbal self-esteem over the same period. Gurney's explanation for the improved self-esteem in the control group was that they had experienced the same extraction procedures.

Gurney found at post-test analysis a statistically significant difference in overt self-esteem as recorded by teachers, but failed to find any differences in the other dependent variables of global and specific self-esteem such as self-esteem as a learner, self-esteem as a mathematician and self-esteem as reader, using Coopersmith's Self-esteem Inventory. On other measures he also failed to find any differences between areas such as attainments (Ncalc, Analysis of Reading and the NFER, Arithmetic Tset 2A), manifest anxiety (Children's Manifest Anxiety Scale, Castaneda, McCandells & Palermo, 1956) and Locus of Control on the Scale for Intellectual Achievement Responsibility (Crandell, Katkovsky & Crandell, 1965). The results of the current study, although not using all the same scales, give equivocal but very tentative and qualified support to the above research as no significant differences between the two
groups were found in any of the measures. Also a substantial increase in positive self-referents was elicited, but no improvements in self-rated self-esteem were found.

After the eliciting of positive self-referent verbal statements, global self-esteem decreased very slightly, but increased in the control group. The domain-specific areas of social and general self-esteem rose very slightly, but also increased for the control group. Parental self-esteem remained virtually unchanged and decreased very slightly in the control group. Academic self-esteem decreased very slightly, but again, it also did for the control group. Again, as in Gurney’s work, when the experimental group’s self-esteem altered, however slightly, the results were often mirrored in the control group.

Interestingly, although the current study did not use exactly the same measures as Gurney, the results of the current study show that no differences were found between the two groups in terms of other affective measure such as Rutter’s B2 Behaviour Questionnaire or Peer Preferences. Although these measures were not the same as used by Gurney, they perhaps demonstrate the difficulty of finding either academic and/or affective changes in children who have emotional and behavioural difficulties.

The results of the current study also show, as Gurney found, that locus of control was unaffected by the use of positive self-referent verbal statements.

However, unlike Gurney, who found statistically significant differences in overt behaviour as related to self-esteem on the BFR, the results of the current study show that no differences were found in this dependent variable, rated either by teaching or care staff.

A possible explanation for the equivocal findings in the current study in relation to Gurney’s work is that the current study attempted to effect change in children in a residential special school, whereas Gurney drew his sample from children in a ‘special school’. Gurney’s subjects were ‘maladjusted’, whereas in the current study the children had emotional and behavioural difficulties. However, there are similarities in
the subjects in the two studies; the children were of similar age, Gurney’s subjects averaged 10.9, and had I.Q.s between 70 and 89 (WISC). The results of the current study show that the mean age of the subjects was 12.3 with mean mathematics ages of 9.5 and reading ages of 9.7. Therefore, considering both the similarities and differences in the subjects of the two studies, one would expect to find results that are both similar and dissimilar.

Another possible explanation for the difference in the results between the current study and Gurney’s is that he removed subjects who scored at, or below, the median on a test of global self-esteem due to ‘the ceiling effects and statements in the literature concerning unhealthy high self-esteem’ (Weissman & Ritter, 1970). The subjects in the current study were not separated out in any such fashion before any of the three interventions. It could be argued that retaining such subjects, as was done in the current study, made it harder to change their self-esteem and/or other affective measures. Keeping the subjects whose scores were found to show high defensive/lie scores, as was done in the current study, could also negatively affect the results. However, the aim of the study was to attempt to impact on all children with emotional and behavioural difficulties in Bridgeview School, not just a pre-selected sample of those purporting to have either low or high self-esteem scores, or those high or low in defensive/lie scores.

Gurney reported that he could find no work published in Britain using behaviour modification to enhance self-esteem in school children and which had been carried out with ‘maladjusted’ children (p. 87). Unfortunately the situation is very much the same even today for children with emotional and behavioural difficulties as the author was unable to find any work in the literature that was commensurate with either the third intervention in the current study or with Gurney’s (1987) work.

Although there is very little research evidence in the literature, there has been an interest in cognitive behaviour therapy and its relationship to self-esteem for some time,
albeit with a very small number of studies published. However, the author could find no specific studies in the literature that investigated the effects of positive self-referent verbal statements on self-esteem in a actual classroom situation in a residential special school for children with emotional and behavioural difficulties. The nearest match was that of Gurney (1987) as detailed above.

Thus given the paucity of research evidence obtained in the current study and in previous studies in support of the assertion that positive self-referent verbal statements can enhance self-esteem and other affective domains, it is considered the validity of this assertion is open to doubt. Unfortunately, the small numbers in the current study affect the generalisability of the findings to the wider literature.

7.1.4. THE IMPACT OF THE THREE INTERVENTIONS ON BEHAVIOUR

Figure 2 in the results section shows that the current research, in regard to research question 1b, demonstrates that the three interventions had some effect on the experimental group’s behaviour, as recorded by behavioural observations. These results lend further support to the effectiveness of the three interventions in improving behaviour in a residential school setting.

The results shown earlier demonstrate a change in observed behaviour from behaviouristic observations, whereas other measures register no change in ‘behaviour’ as measured by ‘traditional’ ‘traitist’ measures. Interestingly, the results of the current study are in accordance with Bierman et al., (1987) who found play ratings received from male classmates revealed no treatment effects despite the reductions in negative behaviour observed for treated boys during naturalistic peer group interactions. A possible explanation for the contrary results can be found in the work of researchers...
who postulate that behaviourist and traditional traitist measures have different advantages and disadvantages when attempting to assess behaviour, such as:

- behavioural observations provide the most valid assessment of behavioural change
- behavioural observations can tease out interactions that traditional measures can not
- behavioural and traditional measures measure different ‘modalities’
- Traditional measures are too simplistic and impute generalised characteristics

Asher & Hymel (1981), in examining classroom dynamics and the development of serious emotional disturbance, maintained that observational measures in naturalistic settings are perhaps the most valid of behavioural assessment methods. This view is supported by Rogers (2000).

Ormsby & Deitz (1994), when examining verbal behaviours in children with emotional and behavioural difficulties, found that behavioural observation techniques are able to tease out subtle interactions that are perhaps overlooked when using other complimentary measures. They also caution that it is necessary to gather data for assessment and take into account contextual information as behaviour is by definition relative, and the school context should be regarded as a key factor in explaining emotional and behavioural difficulties. Other authors have expressed similar views (Margerison, 1996).

According to Shapiro (1988), in traditional assessment, it is assumed that traits or characteristics are stable across time and situations. As such, questionnaires (such as self-esteem, locus of control, behaviour rating scales of overt self-esteem, work-with/play-with and behaviour inventories used in the current study), are traits that supposedly underlie observed behaviour. Once these characteristics are found, they arc
considered to be a generalised characteristic of the individual in all situations. The results of the current study provide tentative support for this assertion in so far as the traditional ratings barely changed. This could obviously be seen as simplistic, and therefore behaviour observations of actual behaviour were used to complement the assessment in the current study.

Given that there were significant changes in operationally defined overt behaviour, whereas no statistically significant change was observed or recorded on all the other measures in the current study, the results of the current study are in agreement with Gresham (1981a). He stated that rating scale measures and nomination measures assess different dimensions of sociometric status. Behavioural measures emerge as a separate factor suggesting that these measures assess a dimension of social competence that is independent from popularity or peer acceptance.
7.2. FINDINGS REGARDING RESEARCH QUESTION TWO

7.2.1. LOCUS OF CONTROL

The results of the current study, regarding research question 2a, show the mean combined score for the experimental and control groups before any interventions occurred was 10.4 (means range from 19.1 at the third grade to 11.65 at the ninth grade). As lower scores indicate internal attribution of responsibility, the results of the current study do not support the assertions often found in the literature that external locus of control is strongly associated with emotional and behavioural difficulties (Gresham & McMillan, 1997). They tentatively support the contention by Eslea (1999) mentioned earlier, that behavioural disorders might involve an excessive externalisation of negative experiences and that disruptive behaviour may be an internalising problem, or at least have internalising aspects, akin to depression.

No statistical difference was found between the experimental and comparison groups over any of the three interventions. However the results of locus of control (Table 7) show that over the series of interventions 1, 2 and 3 the experimental group became slightly more 'internal', whereas the control group became slightly more 'externally' oriented. Unfortunately, the author could find very few studies attempting to assess the effects of actual interventions on children with emotional and behavioural difficulties' locus of control in classrooms, let alone in a school for children with emotional and behavioural difficulties. The exception was that of Gurney (1987). The results of the current study show that, like Gurney's results, no significant difference was found in locus of control due to the impact of the intervention of positive self-referent verbal statements. An examination of the raw scores in Table 7 shows a large variation in the children's initial pre-test scores. For example, E, in the experimental
group, had a pretest score of 5, and therefore (supposedly) was very internally orientated, whereas J, for example, in the control group, had a pre-test score of 14 and was (supposedly) much more externally orientated. The results of the current study support the assertions of Versi (1995) that there is evidence that children with emotional and behavioural difficulties can be discriminated within this group, as either internals or externals, and therefore children with emotional and behavioural difficulties do not automatically all have an external orientation. A possible reason for this finding is that different instruments have been used in assessing locus of control. For example, Gurney (1987), although he found no significant differences in locus of control, as in the current study, used the Scale for Intellectual Achievement Responsibility-IAR (Crandall, Katkovsky, and Crandall, 1965). However, as the construct of locus of control is not operationally defined in any studies conducted to date, it is possible that where different instruments are used to measure the construct, they will be measuring somewhat different aspects of the same phenomenon. Therefore, this may to some extent account for the differences in the findings of both the current study, and Gurney’s (1987) research, from those of other studies in the literature.

7.2.2. PEER PREFERENCES (WORK-WITH/PLAY-WITH)

The results of the current study, regarding research question 2b, show that no significant differences were found between the experimental and comparison groups on ‘work with’ and ‘play-with’ ratings over the course of the three interventions as shown in Tables 8 and 9.

Various government documents maintain that a reciprocal relationship exists between emotional and behavioural difficulties and social/affective functioning (DfE
Circular 9/94; Excellence for All Children, DfEE, 1997a; Programme of Action, 1998). For example the DfEE document 9/94 states 'Improvements in pupil behaviour are more likely to follow if the pupil's self-esteem is enhanced, and if the pupil can be helped to recognise the effects of his or her behaviour' (p.11). Unfortunately, the author could find no studies that specifically used the work-with/play-with scales as a measure of social interaction on children with emotional and behavioural difficulties.

In a recent review, Gresham & MacMillan (1997) found children with emotional and behavioural difficulties had poorer peer-related social skills, exhibited more interfering problem behaviours, and were poorly accepted or rejected by peers. Gresham et al. (1998) in a similar study found that on average, almost two thirds of the 'hyperactivity-impulsivity-inattention and conduct problems' group were rejected by their peers compared to one third of the internalising and externalising problems group and only 12.5% of the matched controls.

According to Bevington & Wishart (1999) who examined the influence of classroom peers on cognitive performance in children with behavioural problems who attended two special schools for children with emotional and behavioural difficulties in Scotland 'the fact remains, however, that children with behavioural problems disrupt their own education and also that of their classmates' (p.32).

As the results of the current study show, the experimental group did not, in fact, have problems with who they wanted to work with and play with, according to their own ratings. Yet, as the behavioural observations in Figure 2 show, the behaviour in the three operationally defined behavioural categories, as rated by others, showed that the children did in fact have substantial problems interacting with their peers. A possible and very tentative explanation for the above is that the children were experiencing a different perception of reality to the observers, i.e. the children did not perceive the negative interactions with their peers as negative at all. Thus, given the paucity of
research evidence obtained in the current study and in previous studies, the results of the current study cannot be regarded as providing convincing support for this assertion that there is a reciprocal relationship between self-esteem and behaviour. Unfortunately, the small numbers in the current study affect the generalisability of the findings to the wider literature.

7.2.3. OVERT SELF-ESTEEM ON COOPERSMITH'S BEHAVIOUR RATING FORM (BRF)

The results of the current study show, regarding research question 2c, that no significant differences were found between the experimental and comparison groups on the Coopersmith's Behaviour Rating Form (BRF) as rated by the teachers (Table 10) and by the care-staff (Table 11).

Equivocal findings have been reported in the literature for overt self-esteem in children with emotional and behavioural difficulties. In older studies, no significant differences were found in overt self-esteem after interventions (Altmann & Finesz 1973; Ammerman & Fryear, 1975). Contrary findings were found by Gurney (1987). He found positive self-referent verbal statements made a significant difference in overt self-esteem for children with emotional and behavioural difficulties as recorded by teachers. Ogier & Hornby (1996) assessed the impact of differential reinforcement on the behaviour and self-esteem of a group of children with emotional and behavioural difficulties and found that, although the behaviour of the experimental group improved, differential reinforcement did not positively affect global self-esteem, or overt self-esteem as rated by teachers. This demonstrates that improvements in self-esteem for children with emotional and behavioural difficulties in classroom situations are not as easy as some professionals in the literature suggest. Unfortunately, the small numbers in the current study affect the generalisability of the findings to the wider literature.
7.2.4. RUTTER'S B2 BEHAVIOUR QUESTIONNAIRE

The results of the current study, regarding to research question 2d, in Tables 12 and 13 (and appendix 25 and 26) show that behaviour improved for both the experimental and comparison groups throughout the duration of the interventions as recorded by teachers and care staff. Although the experimental group behaved better as the intervention progressed, as rated by both the teaching and care staff, the control group behaved even better still. However, the improvement was not statistically significant.

Unfortunately the writer was unable to locate any research in the literature that had examined the impact of interventions on Rutter's B2 Behaviour Questionnaire in actual classrooms in residential special schools with children with emotional and behavioural difficulties. However, Verduyn, Lord & Forrest (1990), in evaluating the effectiveness of a school-based social skills programme in three year bands of an Oxford middle school, who were 'observed to have behaviour problems and/or experience difficulties in social interaction', found no overall treatment effect using a social behaviour checklist. This consisted of 27 problem behaviours compiled during piloting from various standardised tests.

Royer et al., (1999) concluded from results of their work on children with emotional and behavioural difficulties that only the students themselves perceived an improvement in their social skills. However, teachers and parents perceived no differences in behaviour problems (or in fact their social skills). The results of the current study support the above findings in that there was no overall statistically significant treatment effect.

A possible reason for the overall mixed, and ultimately equivocal findings in the current study, is that Bridgeview School's inherent regime of positive reinforcement
strategies swamped any of the positive behaviour changes picked up by Rutter's B2 Behaviour Questionnaire findings.

7.3. MEASUREMENT ISSUES

7.3.1. THE LEVELS OF SELF-ESTEEM FOUND IN THE CURRENT STUDY

Global self-esteem measures on the BCFSEI-2, taken as a one-off 'assessment' on the 31 children in the ‘middle school’ demonstrate that the overall mean of global self-esteem falls exactly on the low/intermediate border. This was discussed in detail in chapter 4, with the scores shown in Appendix A. Appendix A shows that there is a great deal of variation in both self-esteem scores (ranging all the way from 16 to 45). As all children did not have low self-esteem the current study provides no real evidence in support of the assertion commonly made in the literature that all children with emotional and behavioural difficulties have low levels of self-esteem.

Due to the above findings of self-esteem scores at two different times (assessment and pre-test, where the mean scores for global self-esteem are virtually reversed prior to any interventions taking place) the results of the current study, if anything, could be said to be 'equivocal'. They are in accord with the levels of self-esteem also found by other researchers who obtained 'equivocal' results for levels of self-esteem in emotional and behavioural difficulties populations (Daniels et al., 1999; Renick & Harter, 1989; Schneider & Leroux, 1994). The experimental group had not only mean intermediate levels of self-esteem, but their mean self-esteem scores were higher at pre-test than that of the control group and therefore it could be posited that it would be much harder to raise the experimental group's self-esteem levels even further. It is also perhaps worth noting that one of the six children in the experimental group at 'pre-test'
did in fact have 'high' self-esteem and was considered perhaps the most disturbed member of the group of six by all of the staff in the school. This may partly explain why the self-esteem results did not change.

The current study therefore provides no real evidence in support of researchers who found a strong relationship between low levels of self-esteem and children with emotional and behavioural difficulties (Bracken 1996; Cooper, 1996b; DfE 9/94; Gurney, 1981, 1987; Lund, 1987; Margerison, 1996; Martin & Hayes, 1998; Miron, 1971; O'Leary & O'Leary, 1972; Place et al., 1999). The results of the current study therefore only provide tentative support for children with emotional and behavioural difficulties having poor self-esteem in spite of the widespread assertions to the contrary reported in the literature.

Several researchers have suggested a link between higher rates of 'delinquency' and poor self-esteem (Finn, Scott and Zariachny 1988; Patterson, 1986; Richmans, Brown and Clark, 1984). However, some studies could find no link with 'delinquency' and self-esteem. Kaplan (1978) for example, found that the self-esteem of some delinquent adolescents was in fact elevated when they did not identify with the mainstream peer group and join gangs, thereby comparing themselves to a different reference group. More specifically, previous research in the literature has maintained that there exists a very strong link between low levels of self-esteem and children with emotional and behavioural difficulties (Lund, 1987; Miron, 1971; O'Leary & O'Leary, 1972). More recent studies have also found a strong relationship between low levels of self-esteem and children with emotional and behavioural difficulties (Cooper, 1996b; DfE 9/94; Margerison, 1996; Martin & Hayes, 1998; Place et al., 1999), whereas, other research in the literature has found no evidence for children with emotional and behavioural difficulties having low self-esteem (Gresham & MacMillan, 1997; Margerison, 1996). Daniels et al. (1999) felt that there is in fact a widespread
impression but little actual evidence that a comprehensive and suitable research data base exists on the self-esteem of children who exhibit emotional and behavioural difficulties.

The results of the current study therefore provide only tentative support for the assertion, often made in the literature, that children who are emotionally and behaviourally disturbed have low levels of self-esteem. Furthermore, there is clearly initial cause for concern regarding the variability of the scores found in the current study as both the range of global self-esteem and lie scores were found to be extremely variable, as can be seen in Tables 5 and 6. Unfortunately, the small numbers in the current study affect the generalisability of the findings to the wider literature.

7.3.2. SELF-ESTEEM VIEWED AS A CENTRAL MEDIATING VARIABLE IN BEHAVIOUR IMPROVEMENT

The results of the current study provide no support for a reciprocal relationship between self-esteem and behaviour as no statistically significant raise in self-esteem occurred and no statistically significant improvement in behaviour occurred, using traditional ‘traitist’ or behavioural measures, as although free-time behaviour sessions improved, no corresponding increase in self-esteem occurred.

Early research (Gold & Mann, 1984) postulated a cycle in which increasingly frustrated-by-school-failure children become more disruptive with age, with more attention paid to behaviour and less to academic failings. As the cycle perpetuates itself the children fall further behind and become more of a problem. Their self-esteem is viewed as a central mediating variable, with consistent failure threatening self-esteem. This results in a search for less socially-sanctioned activities through which they can experience success. Finn, Stott & Zarichny (1988) also subscribed to this rudimentary
model and found, when reviewing the educational histories of youngsters who appeared in juvenile courts, that in order to increase their self-esteem levels, greater participation in school was necessary. Interestingly, however, no data on actual self-esteem scores can be found in their research paper to substantiate their claim for the postulated cycle of school problems/delinquency and low self-esteem. Other work by researchers such as Grizenko, Papineau, & Sayegh (1993) found improvements on both self-esteem and behaviour after multimodal day treatment.

According to McNamara & Morton (1995) the first approach to children with emotional and behavioural difficulties should be to address their feelings about themselves. The raising of their self-esteem through counselling approaches is a prerequisite to any changes in behaviour. In support of self-esteem first, behaviour change later, is other research (Asarnow, Carlson & Guthrie, 1987; Kendall, Stark & Adam 1990). According to London (1996) a summary of the research data on self-esteem research shows there is no evidence to support even a correlation between higher self-esteem and other affective variables (such as mental health, productive behaviours, and pleasure in living). One cannot raise self-esteem through achievement (London, 1996). The results of the behavioural observations in the current study therefore provide tentative support for this assertion, as the children's behaviour (in the free-time session) underwent a significant change, but their self-esteem did not, therefore behaviour and self-esteem are completely unconnected. When Schneider & Leroux (1994) reviewed 25 controlled studies comparing the progress of children (6-16 year olds) with behavioural disorders in mainstream and special classes, they found inconsistent results for self-esteem and behavioural improvements depending on settings. Therefore as the results of the current study are so equivocal they are probably most in agreement with Schneider & Leroux (1994).
Research in the literature suggests that different measures on supposedly identical populations can result in the identification of different 'disabilities' (Daniels et al., 1999). Therefore, a classification made with one group of tests is not always generalisable to an identical classification based on other instruments and this clearly limits the kinds of conclusions that could be drawn. This may, for example, have relevance to the current study, as one is left wondering if those labelled as having emotional and behavioural difficulties in some research studies are equivalent to the children found in Bridgeview School, and this may go some way towards explaining the equivocal nature of the results as compared with those generally found in the literature. Unfortunately, the small numbers in the current study affect the generalisability of the findings to the wider literature.

7.3.3. The Relationship between Self-Esteem in Children with Emotional and Behavioural Difficulties and Those with Other Special Needs

In order to answer the question 'What are the characteristics of emotionally and behaviourally disturbed population?', raised in chapter 2 and continued in chapter 5 under measurement issues, we briefly consider the results of the current study in the light of research findings in the literature attempting to demonstrate or refute differentiating relationships between self-esteem in children with emotional and behavioural difficulties, and those with other special needs. Studies need to be examined in the light of comorbidity factors (Rock et al., 1997) and definitional inconsistencies in the above terms (Gresham et al., 1998), also the lack of a suitable and comprehensive research base on children with emotional and behavioural difficulties (Daniels et al., 1997) with which to compare our results. For example, unfortunately, the author could find no intervention studies in the literature that
specifically examined domain specific self-esteem of children with emotional and behavioural difficulties, apart from Gurney’s interventions. However, Gresham et al., (1998) found that, in their review of 231 studies, children with emotional and behavioural difficulties, special needs and normal controls did not differ on measures of social self-concept, academic self-concept and general self-esteem.

The children with emotional and behavioural difficulties in the current study displayed borderline intermediate/high academic self-esteem (as seen in the appendix) and therefore ‘unrealistic’ levels of academic self-esteem. Exaggerated or inflated levels of self-esteem in other domain-specific areas have been found in samples of children with special needs, particularly those displaying learning difficulties (Bear & Minke, 1996). Gresham et al., (1998) maintain that whether this is due to intentional exaggeration or a selective focus on positive information and filtering out negative information remains to be demonstrated. They suspect that children having unrealistically inflated views of themselves, in spite of objective evidence to the contrary, tend to have more adjustment difficulties and may be more resistant to intervention efforts.

The results of the current study provide very tentative support for this assertion, as ‘intermediate/high’ levels of parental self-esteem (as seen in the appendix) were found with no realistic explanation possible. Reasons for the unrealistic levels of parental self-esteem must be purely speculative. However, perhaps it was part of a wishful thinking exercise on the children’s part as many of the children’s parents were either unlocated, deceased, only allowed strict supervised visits, or the children were adopted on short-term foster placements or placed in a continuous round of children’s homes. Also many of the children were resident throughout the week in school.

Perhaps it is not too surprising the results of the current study showed that the overall mean of global self-esteem in the middle school falls exactly on the
low/intermediate border. The evidence for the low self-esteem of all children with special needs, not just those with emotional and behavioural difficulties, is at best equivocal, as stated earlier.

7.3.4. THE EQUIVOCAL RESULTS OBTAINED FOR GLOBAL SELF-ESTEEM IN RELATION TO EMOTIONALLY AND BEHAVIOURALLY DISTURBED CHILDREN

As low self-esteem is generally considered a marker for emotional and behavioural disturbance in the literature an alternative explanation for the fact that 54% of the children in the whole middle school had ‘very low/low’ global self-esteem and 46% had ‘intermediate/high’ global self-esteem is that firstly, not all the children were emotionally and behaviourally disturbed. However, this is unlikely, as the writer found, and has mentioned earlier, that some of the children with the highest self-esteem scores gave the highest lie scores (and were therefore least defensive), but were amongst the most disturbed of the children in the middle school group at that time).

A second clue as to a possible explanation for some of the equivocal results found in the literature has been suggested by Margerison (1996) who maintained that children with emotional and behavioural difficulties have ‘summary judgements’ such as ‘He has low self-esteem’, and these judgements are made on little more than a hunch. It is maintained that although teacher judgements have been shown to be accurate in a number of studies, as a base for the use of specific intervention strategies, the above level of ‘diagnosis’ is inadequate. The results of the current study seem to lend tentative support to Margerison’s (1996) hypothesis of ‘summary judgements’, as in fact, only half the middle school groups as shown in Appendix A had ‘low’ self-esteem. The other half had ‘intermediate’ levels of self-esteem (except one pupil who had ‘high’ self-
As mentioned earlier the results of the ‘pre-test’ in Table 5 show similar findings and therefore could be interpreted in a similar vein. A third, possible explanation is of course that the BCFSEI-2 is insufficiently sensitive in its ability to discriminate between levels of self-esteem in children with emotional and behavioural difficulties. In support of this explanation are the results in Table 6 for the lie scores for the children’s performance on the BCFSEI-2. Lie scores ranged all the way between 10 and 1.

Table 6 (and Table 21 in the Appendix) provide a fourth explanation, in that they show that throughout the duration of the three interventions, including the time from assessment to follow-up, 38% of the experimental group and 46% of the control group’s lie scores were 5 or less (5 is on the margin of the cut-off point), showing an extremely high degree of lying/defensiveness.

The above results of the defensiveness/lie scores of the experimental and control groups for the duration of the three sequential interventions have obvious implications for the reliability and validity of the BCFSEI-2. These concerns regarding the reliability and validity of the BCFSEI-2 have been raised earlier in the context of threats to internal and external validity in some of the domain-specific scores.

The extremely high degree of defensiveness/lying scores for both groups have serious implications, but unfortunately do not explain, the somewhat enigmatic differences found in the scores of various dimensions of self-esteem which have been described earlier. It is not possible to give a valid explanation of the self-esteem scores on the various dimensions between and within interventions for both the experimental and control groups. It could be considered that all the scores are suspect due to the high degree of defensiveness/lying displayed by both the experimental and control groups. There is the alarming, but real prospect that the ‘true’ scores of both groups may be
seriously contaminated/hidden due to the real possibility of the BCFSEI-2 being an inadequate instrument for the population under investigation in the current study.

This has obvious implications for assessing the effects of the series of sequential interventions, especially as the sample is so small. If a third of the experimental and control groups show a high degree of defensiveness/lying on the BCFSEI-2, and 42% of the scores are on or below the cut-off margin, then the value of the overall results for the BCFSEI-2 may have to be treated with a certain degree of caution.

7.3.5. POSITIVE ILLUSORY BIAS/FALSE SELF-BEHAVIOUR

Some researchers (Bear et al., 1998; Harter et al., 1998) acknowledge the existence of positive illusory bias or false-self behaviour that results in unrealistically high levels of self-esteem in individuals, in spite of evidence to the contrary, but maintain that it is better explained as a product of social comparison with one's peers. Coleman (1983) for example maintained that social comparison theory (Festinger, 1954) helped to explain negative self-esteem of special needs children in mainstream education. Harter et al. (1998) maintained that the answer can be found in James' theoretical model of self-esteem in which competence or success in domains of importance is a primary predictor of the overall evaluation of one's worth as a person. However, the results of the current study do not throw any light on James' (or others') theoretical models.

Other researchers citing evidence against social comparison theory as an explanation for positive illusory bias can be found in the literature (Chapman & Tunner, 1995) with Widamen et al. (1992) maintaining that social comparison theory as an explanation for positive illusory bias is too simple.

Gresham et al. (1998) questioned these positions and instead suggested that, if anything, many children who display an aggressive, externalizing behaviour pattern
suffer from positive illusory biases in academic and social self-concept as well as global self-esteem. They maintain that there is reason to believe that some children maintain an overly positive view of themselves in spite of objective indices to the contrary in areas of peer acceptance, teacher perceptions, school adjustment, and academic achievement, basing their hypothesis, in part, on research demonstrating a relationship between aggressive behaviour and egotism. Gresham et al. (1998) suggest that a major cause of aggressive or violent behaviour, that is, an externalizing behaviour pattern - often observed and recorded as 'incident reports' on the children in the current study - is high self-esteem combined with external evaluations that challenge, contradict, or question an individual's competence or feelings of high self-regard. As unrealistic levels of self-esteem or positive illusory bias/false self-behaviour were found in the current study (and intermediate/high parental and academic self-esteem scores in the appendix) the results of the current study provide some very tentative support for studies in the literature such as those of Stanley, Dia & Norton (1997) who maintained that 'behaviourally disordered' children have unrealistic self-concepts. However, as mentioned earlier, the results of the current study can also, rather controversially, provide very tentative support for studies in the literature who found 'equivocal' results or those who found no evidence for children with emotional and behavioural difficulties having low self-esteem.

Many explanations can be found in the literature attempting to explain the unrealistic levels of self-esteem or positive illusory bias/false self-behaviour (but the results of the current study were not designed to support or refute them), and some are illuminated here. For example, we find; perceived social support from others, perceived competence in domain-specific areas, discounting, children with emotional and behavioural difficulties see themselves as socially adequate even when moved from the mainstream setting, extra help in the class, perception of, for example, parental
acceptance, frequent teacher feedback that may overshadow and mediate the effects of negative social comparisons on self-esteem and lack of cognitive development.

Interestingly, Fegley (1997) maintained that false self may be normal in adolescents, especially those who are disturbed, and Gresham et al., (1998) felt that we do not know if it is the case that self-esteem may be stable for children with special needs but not for children with emotional and behavioural difficulties. Edgerton & Sabagh (1962) maintained that children in institutions compare themselves with others of even lower ability and are therefore taking part in 'aggrandisement of self'. This is of course very similar to Marsh et al.,'s (1995) ideas on the 'big fish, little pond' theory.

However, once again, the results of the current study cannot and do not directly support or refute any of the above assertions and are therefore of limited relevance when considering the implications of the theoretical models of causality of self-esteem and children with emotional and behavioural difficulties. Nevertheless, the results of the current study do lend very tentative support to some of the explanations submitted. For example, we are able to state that the children in the current study did get extra help in the classroom from both teachers and teachers' aides, they were lacking in cognitive development and they did behave like children of a much younger age.

The weak effect found for children with emotional and behavioural difficulties having only relatively low levels of self-esteem (intermediate/low borderline on the BCFSEI-2) in the current study, raises the possibility that this effect of low self-esteem is not limited or even strongly related to children with emotional and behavioural difficulties. It is considered that the confidence in the validity and salience of the assertion commonly made in the literature, that children with emotional and behavioural difficulties have low levels of self-esteem, is in fact difficult to justify. Unfortunately, the small numbers in the current study affect the generalisability of the findings to the wider literature.
In conclusion of this section, the only thing we can say for certain regarding the results of the current study and the research in the literature is that we can say nothing for certain regarding the characteristics of self-esteem in an emotionally and behaviourally disturbed population.

7.3.6. THE NEED FOR MULTIPLE MEASUREMENTS OF AN EMOTIONALLY AND BEHAVIOURALLY DISTURBED POPULATION

This section discusses the findings from the current study in relation to why we need multiple measurements of an emotionally and behaviourally disturbed population. Multiple measurements in the literature on emotionally and behaviourally disturbed children regarding their self-esteem, affective variables or behaviour are extremely scarce. One contribution of this study is hopefully enhancing, in some small way, that knowledge. What literature does exist is particularly fraught with equivocal and contradictory findings on both self-esteem and emotional and behavioural difficulties. Although there is a great deal of literature on self-esteem, there is a dearth of research on children with emotional and behavioural difficulties. Worse still, there is virtually no literature on children with emotional and behavioural difficulties and self-esteem. This is particularly the case if one is looking for actual interventions attempting to impact on self-esteem in a mainstream classroom, let alone actual interventions attempting to impact on self-esteem in a residential school for children with emotional and behavioural difficulties (Daniels et al., 1999).

Research in the literature suggests that different measurement methods result in the identification of different populations that are supposedly the same, especially when attempting to classify children with potential emotional and behavioural difficulties. This limits the utility of screening and assessment instrumentation. Therefore, a
classification made with one group of tests is not always generalisable to an identical classification based on other instruments. Fletcher, Morris & Francis (1991) maintained that this clearly limits the kinds of conclusions that could be drawn from much of the efficacy research. This may, for example, have relevance for today's emotionally and behaviourally disturbed students, and be compounded with time. As well as multiple measures being recommended in the literature for children with emotional and behavioural difficulties, many researchers also recommend multiple interventions. (Daniels et al., 1999; Gresham & MacMillan, 1997; Rock et al., 1997). The somewhat equivocal results of the current study provide very tentative support for this assertion, as the overall results of the three interventions were weak.

Royer et al., (1999) concluded that 'an effective (social skills) intervention must be based on multi-assessment, multi-intervention, multi-environment and multi-outcome measures' and that 'when working with students with emotional and behavioural difficulties there are important limitations to the efficacy of interventions taking place in school alone. The complexity of behavioural disorders makes it mandatory to implement interventions in the other living contexts of adolescents' (p. 8). With the above in mind, ascertaining the impact of three interventions on self-esteem, and comprehensively monitoring the results, not by just employing a single measure of self-esteem, but by including other affective and behavioural measures in order to obtain a more comprehensive overall picture of the effects of the treatments, is a valuable exercise. The results of the current study provide very tentative support for the above assertion in so far as behaviour change was found as shown in Figure 2, but not convincingly so on other measures.

The literature on children with emotional and behavioural difficulties is also fraught with problems of definition/categorisation. Questions are constantly asked as to what exactly is a child with emotional and behavioural difficulties. Unfortunately, as
detailed earlier in the current study, no simple answers are forthcoming. Children are allocated to Bridgeview School on the basis of their 'statements'. Ergo, it is accepted that they have emotional and behavioural difficulties. No actual tests are carried out on them for emotional and behavioural difficulties before they arrive. There are none. As they are deemed to have emotional and behavioural difficulties, again, ergo, they have low self-esteem.

It is from this basis that the children in the current study were allocated to either experimental or comparison groups. However, some of the preliminary self-esteem scores obtained, as extensively explored earlier, do not provide convincing support for the assertion that all children with emotional and behavioural difficulties have 'low' self-esteem.

A worrying example of the problems encountered in assessing children in actual classroom situations, even by two teachers who know the pupils well and use the same instruments, can be found in the current study. Niki and Pete were both asked to assess the children's overt behaviour using Rutter's B2 Behaviour Questionnaire. Using non-parametric tests (Mann-Whitney U) to compare Pete and Niki's data, it was found that statistically significant differences in how they rated the children's behaviour occurred for all four occasions. However, their ratings were internally consistent over the interventions. Pete, the more experienced of the teachers, consistently rated the children's behaviour, in both the experimental and control groups, as about twice as disturbed as did Niki.

Furthermore, statistically significant differences were found in how they rated the children's behaviour, although not to such a marked degree, on the BRF (but not for the pre-test). Again, their ratings were internally consistent over the interventions, with Niki consistently rating both groups as having higher overt self-esteem. Therefore, the above results found in the current study provide tentative support for the suggestions,
found in the literature, that it is wise to have multiple measures when assessing children with emotional and behavioural difficulties.

From an overall analysis of the literature we would have expected the three interventions in the current study to have a substantial effect on normal children. Whether, however, the effect would be similar for the children in the current study is disputed in principle in the research literature. For example, early research by Achenbach & Edelbrook (1978) maintained that children with emotional and behavioural difficulties differ in terms of clinical features, course and prognosis compared with normal controls. Elias (1987) maintained that they respond differently to school-based therapeutic interventions compared with normal populations. The somewhat equivocal results of the current study provide very tentative support for this assertion, as the overall results of the three interventions were weak. The following section examines the possible reasons for the negative tenor of the results.
7.4. POSSIBLE EXPLANATIONS FOR THE NEGATIVE TENOR OF THE RESULTS

It is clear from the discussion so far in this chapter that the overall findings of the current study are not in accordance with those generally found in the literature regarding the level of self-esteem or the ease of positively impacting self-esteem and other affective variables in children with emotional and behavioural difficulties. There are several possible reasons for this.

- As concluded in chapter two there is limited hard evidence available to support the above assertions that firstly, children with emotional and behavioural difficulties have low self-esteem (Gresham et al., 1998) and secondly, that it is relatively easy to positively impact upon their self-esteem and other affective variables. It may well be that the literature paints a more positive picture of these effects than is in fact the case (Ogier & Hornby, 1996). As early as 1987, Gurney, pointed out that studies (Hairston & Cooper, 1973; Gearhart et al., 1977; Gurney, 1981) had found that experimental groups had made ‘significant progress’ in enhancing self-esteem but not significantly different from that of the control groups.

- There is some evidence to suggest that the experiences of practitioners may differ depending on the type of ‘disability’ children with emotional and behavioural difficulties in fact have (Daniels et al., 1999; Gresham et al., 1998; Rock et al., 1997). Thus the effects of interventions designed to impact on self-esteem and other affective domains and/or behaviour may differ depending on the way children are allocated to the category ‘emotionally and behaviourally disturbed’. As discussed earlier in chapter 2, in their review of children with emotional and behavioural difficulties, Daniels et al. (1999) have suggested that children who are truly emotionally and behaviourally disturbed have a co-morbidity of problems, with them experiencing a whole plethora of
difficulties in various domains, as occurs in the current study. Although the literature reviewed for children with emotional and behavioural difficulties is generally very sparse, it is predominantly based on children who are not in residential special schools, and, therefore, there may be qualitative differences between populations. Therefore, the effects of interventions on children with emotional and behavioural difficulties who are in residential special schools may be more negative than for children in mainstream schools who are also labelled as having emotional and behavioural difficulties. This may, at least partly, account for the more negative results found in the current study than are generally reported in the literature to date.

- The children in the current study with emotional and behavioural difficulties had mean ages of 12.3. Thus, all the children were pre-adolescent, but most of the studies in the literature on children with emotional and behavioural difficulties were conducted with children in the primary grades or with adolescents/youths.

- As stated earlier in the results section, 38% of the experimental group scored 5 or less showing a high degree of lying/defensiveness on the BCFSEI-2, which suggests that their responses on (all?) questionnaire measures may have been influenced by a tendency to present themselves in socially desirable ways. If this was in fact the case, then the overall results obtained on questionnaires used in the study may be unreliable, and it may not be possible to ‘truly’ judge whether improvements were, or were not made, especially as some of the children started from a relatively high baseline score on BCFSEI-2.

- As stated and explored more fully earlier when discussing internal and external validity issues, scores for global self-esteem and domain-specific self-esteem on the BCFSEI-2 were virtually reversed between the assessment and pre-test stages. If this
was the case it suggests that the reliability and/or validity of the BCFSEI-2 may not be as accurate for all children as is generally reported in the examiner's manual.

- There are some suggestions in the literature that the results of studies to increase self-esteem may differ depending on the type of self-esteem inventory used (Gurney, 1987). Thus the effects of interventions designed to impact on self-esteem and other affective domains and/or behaviour may differ depending on the self-esteem scale used.

- The experience of the author in implementing strategies to positively impact on self-esteem and other affective variables and behaviour (ratings) may not be as great as the majority of practitioners/researchers reporting in the literature. It is possible a more experienced practitioner/researcher could have obtained more positive results due to a greater degree of competence and experience in the design, and in particular, in the actual implementation of interventions. Therefore, this, at least partly, may account for the less positive results found in the current study than are generally reported in the literature. However, this needs to be set against the results shown in Figure 2 where large improvements are to be found in the operationally defined behaviours in naturalistic settings recorded throughout the interventions.

- Some researchers, in reviews, claim that 'social skills' interventions (in the wider sense) are, in fact, only of limited success, even for 'normal' children, (Frankel & Myatt, 1996; Kavale & Forness, 1995; McIntosh, Vaughn & Zaragoza, 1991). They found 'social skills' do not transfer to out-of-school situations, that in fact we know very little about the relationship between children's reported self-esteem and their behaviour from investigating social skills programmes, and that it is practically impossible to conclusively demonstrate the efficacy of social skills training programmes due to lack of control groups in most of the published studies. Schneider's
(1992) meta-analysis found that social skills training programmes may be effective, but differences in the measurement of change or in the populations being targeted can cause problems. Also, as we have no agreed operationally defined definitions in the literature of 'social skills', 'co-operative' learning, and 'cognitive (behavioural) interventions', including 'self-talk', we cannot be even reasonably sure that all children are receiving the same interventions.

It is hoped that it can be seen from the general thrust of argument in the current study, and in particular the discussion in chapter 2, the tautological problem of definition of children with ebd. The research findings of this study were that researchers rarely articulate a definition, let alone a clear definition of ebd. This has an effect on the explanatory power of the results in the current study and the relationship of the results to the general body of literature. The tautological nature of the problem means that no empirical research can be secure until some solution to this problem is found.
7.5. WEAKNESSES OF THE CURRENT STUDY

A major weakness of this study is it was not feasible to include a larger group that were a representative sample of children with emotional and behavioural difficulties in the time available. Thus, it is difficult to evaluate the extent to which similar results would be found for children with emotional and behavioural difficulties if a larger sample were included.

As mentioned earlier in chapter five, another weakness was the possibility of inadvertent potential researcher bias arising from the writer carrying out the research within his employing institution.

Another weakness of the study is the high degree of defensiveness/lying found on the BCFSEI-2. Thus the validity of the findings regarding children with emotional and behavioural difficulties may have been somewhat reduced.

Also, since this study was restricted to children with emotional and behavioural difficulties in a residential special school, the ability to generalise these findings may be limited, and their applicability to children with emotional and behavioural difficulties in, for example, mainstream settings must be considered with caution.

In addition, the age range of the children (11-13) was very restrictive (with a mean of 12.5 years), which further limits the ability to generalise these findings.

Also, since the results are reported in terms of their levels of statistical significance and not effect size (Lunt & Livingstone, 1989) or substantive significance (Oakes, 1986) it is not possible to estimate the extent to which they are clinically significant. The above example of the B2 ratings as statistically significant is a case in point. Of course, the reverse may also be true and the 'real' level of change in self-esteem and other affective variables may be greater than the statistics actually show.
Paradoxically, what was intended as a strength of the study, multi-modal interventions (Hall & Kataria, 1992; Hinchshaw, Henker & Whalen, 1984) may in fact have turned out to be a weakness as each intervention was relatively short. Also it was not possible to match the experimental and comparison groups, and due to time and administrative restrictions it was not possible to follow up the children's self-esteem or other affective variables. Other researchers have not found that multi-modal studies have additive or interactive effects when using resources both within and without school (Bloomquist, August & Ostrander, 1991).

As mentioned earlier in chapter five, another weakness was the possibility of inadvertent potential researcher bias arising from the writer carrying out the research within his employing institution. Practitioners need to take these considerations into account when planning interventions.

7.6. IMPLICATIONS FOR PRACTITIONERS

The findings of the current research project have problems with generalisability due mainly to the small numbers of children in the study. A key implication for practitioners is that one should not expect change overnight. It appears that for many of the children in the current study, other aspects of their life, such as what goes on out of school, may have a greater impact on their self-esteem etc. than any relatively short-term intervention taking place in the classroom. Possible evidence for the above is the difference between assessment and pre-test scores on the BCFSEI-2, mentioned earlier. Therefore it is important for practitioners to take into account, when designing interventions to positively impact on self-esteem and other affective variables as well as behavioural ratings, the overwhelming impact that extraneous variables from their home situation can have on children with emotional and behavioural difficulties. This
is often not stressed in the literature. Therefore practitioners should be made aware of these other ‘home situation’ variables and consider where possible a more ‘wrap around’ approach as is advocated by some researchers in the United States.

It was clear from the analysis of BCFSEI-2 that a large percentage of the responses were high on the lie/defensiveness scale. Therefore practitioners need to be made aware that trying to accurately ascertain the ‘true’ level of response to questionnaires may not be as straightforward as one is led to believe from an analysis of the literature.

It was also clear from the analysis of BCFSEI-2 that a large percentage of the respondents did not in fact have low self-esteem. Many indeed had intermediate levels, and some high. Therefore, practitioners need to be made aware that ‘summary judgements’ (Margerison, 1996) on self-esteem should not be made simply on the basis that a child has ‘emotional and behavioural difficulties’. Perhaps trying to increase self-esteem in children who already have intermittent/high levels of self-esteem may not be the most fruitful way forward.

What was also clear from an analysis of the BCFSEI-2 was that many of the children had a sense of false self or positive illusory bias. Practitioners should be made aware of these ‘illusions’ and perhaps attempt to undertake strategies or interventions that help the child to be more realistic (presuming the effect is not due to defensiveness or other causes mentioned above outside of the practitioner’s control). This is not to suggest that strategies should be attempted to lower self-esteem, but to make it more in line with what the child can actually achieve and be justly proud of, rather than risk at some future date the child thinking that they can do/become X or Y without the necessary effort and dedication that is actually required. This could avoid a potentially very upsetting series of scenarios at a later date.

Ideally practitioners should have a wide range of types of measures on which to base their judgements on progress when working with children with emotional and
behavioural difficulties. As can be seen from the results of the current study, although there were some improvements in the measures trying to enhance self-esteem and other affective variables, none were statistically significant. However, the discrete behaviouristic categories of operationally defined behaviours (and some may argue that they are a more 'true' and 'accurate' record of what exactly is actually going on, rather than having to impute actions on the basis of intervening variables, and are ultimately, therefore, what 'counts') did show a great improvement over the course of the interventions. Such considerations should be taken into account when practitioners plan an intervention ostensibly focused on self-esteem and other affective variables. However, as mentioned earlier, the small numbers of children in the current study hamper any suggestions of generalisability to the wider ebd population.

7.7. AREAS FOR FUTURE RESEARCH

Further research is needed in order to replicate the current study before the findings can be accepted with confidence. In future studies it would be useful to develop a more widely accepted definition of children with emotional and behavioural difficulties that is operationally defined, as the current definition is somewhat ambiguous. This would enable the results of the current study to be more confidently compared with other studies in the literature of children who supposedly have emotional and behavioural difficulties in, for example, mainstream settings.

Many studies involved with students with 'special needs' do not examine self-esteem at all, with this being especially the case for children with emotional and behavioural difficulties. This needs to be redressed.

Various definitions of self-esteem exist and are used in an interchangeable fashion. This makes comparisons between studies difficult, and especially so for older studies.
that tended just to examine global or overt self-esteem. It would be useful to be able to
develop an operational definition of the term ‘self-esteem’, which is somewhat less
ambiguous, and agreed by all researchers, in order to select the most appropriate
measures and strategies to help children with emotional and behavioural difficulties.
Allied to this concern is that many researchers believe that self-esteem is not based on a
theoretical model of self-concept that is agreed amongst theoreticians, and could
explain the inconsistency found between research studies. Future research is needed in
order to attempt to clarify this fundamental concept.

Different instruments are used to assess self-esteem. Future studies should employ
a self-esteem inventory that includes domain-specific responses. At present some
studies examine global self-esteem, some examine self-esteem domains whereas others
examine only overt self-esteem. This again makes comparisons between studies
difficult.

The BCFSFI-2 recorded a great deal of lie/defensive responses from some children
in the current study. However, the procedures involved in the design of a more accurate
self-esteem inventory would be long and arduous and need a high number of
participants with emotional and behavioural difficulties drawn from both special and
mainstream settings. However, greater awareness through reporting of such scores may
aid detection of possible anomalies in results found in the self-esteem of children with
emotional and behavioural difficulties. It would be useful to be able to develop
operational definitions of the terms ‘social skills’, ‘co-operative learning’ and
‘cognitive behavioural’ interventions which are all somewhat ambiguous, again, in
order to select the most appropriate measures and strategies to help children with
emotional and behavioural difficulties.

Longitudinal studies would be particularly useful, in order to investigate the effects
on self-esteem and other affective variables on the experiences of children with
emotional and behavioural difficulties at different ages and in different settings (special versus mainstream).

Again, many studies involved with students with special needs do not examine affective areas at all, with this again, being especially the case, for children with emotional and behavioural difficulties. This needs to be redressed.

Behavioural observations in many interventions with children with emotional and behavioural difficulties are rare. Those studies that utilise behavioural intervention techniques can experience problems due to the various categories of behaviour defined, methods of time-sampling used, functionally inappropriate definitions of categories of behaviour and difficulties with comparisons/generalisation to other studies. Future studies should attempt to address these problems in order to provide a more comprehensive data base for children with emotional and behavioural difficulties.

Some studies assume, a priori, that the subjects have academic, social skills, co-operative learning difficulties or problems with self-talk. Such assumptions should not be taken for granted.

Also, a wide variety of different intervention strategies are employed attempting to impact on children with emotional and behavioural difficulties. Some focus on academics, others social and affective dimensions, all stressing the primacy of the particular intervention under scrutiny. More research is needed in these areas to build up a data base rooted in 'what works'.

Some interventions use 'analogue' social skills interventions (Lewis, 1994) whereas others have children primarily interacting with adults. This then neglects the problematic interactions between themselves and their peers which is the prime cause of interactional collapse, thus calling into question the validity of the procedures as well as the ability of the treatments to generalise to the 'real' environment. According to some researchers (Tofte-Tipps, Mendonca & Peach, 1982) this is a prime cause of
unsuccessful intervention programmes. Again, future studies should attempt to address these problems in order to provide a more comprehensive data base for children with emotional and behavioural difficulties.

Future studies should not only employ a wide range of measures to investigate the effects of interventions designed to enhance self-esteem, but also employ a wide range of behavioural measures that are operationally defined in order to better discriminate change at different ages and at different stages of development. Also a wide range of research methods should be employed in future research with these children including designs which enable the use of multivariate data analysis.

Finally it would be valuable to conduct separate intervention studies with children who have emotional and behavioural difficulties who express either high or low levels of purported self-esteem in order to examine the similarities and differences that may exist in the experiences of these children, and which types of intervention are possibly differentially more effective. Those children who have low levels of self-esteem could be targeted for intervention. Another possibility is to concentrate on lifeskills interventions rather than self-esteem, i.e. take a more fundamental approach to intervention with children with emotional and behavioural difficulties.
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Berry, G. et al. (1996). Improving Student Achievement through Behaviour Intervention. Master's Action Research Project, Saint Xavier University and IRI/Skylight. PsycLIT.


Gerber, M.M. (1987). Application of cognitive-behavioural training methods to teaching basic skills to mildly handicapped elementary school students (pp.167-186). In M.C. Wang, M. C. Reynolds & H. J. Walberg (Eds.), Handbook of Special Education: Research and Practice (Vol. 2). New York: Pergamon.


Rogers, B. *Cracking the hard class: Strategies for managing the harder than average class.* Paul Chapman: London.


& II. J. Walberg (Eds.), Handbook of Special Education: Research and Practice (Vol. 2). (pp.59-78). New York: Pergamon.


APPENDIX A  

TABLE 17  
GLOBAL SELF-ESTEEM FOR ALL 31 CHILDREN IN BRIDGEVIEW 'MIDDLE' SCHOOL

Taken four months in advance of interventions to assess whether the children do in fact have low self-esteem.

<table>
<thead>
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<th>Class 4</th>
<th>Class 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>G 38</td>
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<tr>
<td>H 43</td>
<td>B 22</td>
</tr>
<tr>
<td>I 29</td>
<td>C 35</td>
</tr>
<tr>
<td>Jp 40</td>
<td>D 42</td>
</tr>
<tr>
<td>K M 33</td>
<td>E 32</td>
</tr>
<tr>
<td>L 37</td>
<td>O 30</td>
</tr>
<tr>
<td>M 38</td>
<td>F 34</td>
</tr>
<tr>
<td>C 45</td>
<td>P 30</td>
</tr>
<tr>
<td>TOTAL 303</td>
<td>MEAN 37.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class 6</th>
<th>Class 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q 32</td>
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<td>A Fr 32</td>
<td>X 17</td>
</tr>
<tr>
<td>R 16</td>
<td>Y 28</td>
</tr>
<tr>
<td>S 35</td>
<td>Z 29</td>
</tr>
<tr>
<td>T 31</td>
<td>ZA 32</td>
</tr>
<tr>
<td>U 30</td>
<td>ZB 43</td>
</tr>
<tr>
<td>V 25</td>
<td>ZC 42</td>
</tr>
<tr>
<td>W 42</td>
<td></td>
</tr>
<tr>
<td>TOTAL 243</td>
<td>MEAN 30.375</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CLASS</th>
<th>MEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 6</td>
<td>30.375</td>
</tr>
<tr>
<td>Class 7</td>
<td>32.8</td>
</tr>
</tbody>
</table>

Individuals therefore fall into the following self-esteem categories:

<table>
<thead>
<tr>
<th>Very Low</th>
<th>Low</th>
<th>Intermediate</th>
<th>High</th>
<th>Very High</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>14</td>
<td>13</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

It can be seen from the above results that the majority of the children in Bridgeview Middle School do indeed have low self-esteem, but a large number have intermediate self-esteem scores and one even had high self-esteem. Total scores of global self-esteem for the four groups combined were 132.975, giving a mean of 33.24. Therefore, the overall mean of global self-esteem in the middle school, falls exactly on the low/intermediate border, supporting the literature that maintains that self-esteem for
children with emotional and behavioural difficulties is below that found for the general population. It was well below the mean found by Battle for Junior self-esteem items (37.98, p.9) and just above that of ADHD subjects who Battle found had a mean of 32.26, (p.81). By visual inspection it is apparent that all groups, except class 4, have low global self-esteem. Class 4 as a group had 'intermediate' levels of self-esteem.
APPENDIX B  

<table>
<thead>
<tr>
<th>Class</th>
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<th>Class</th>
<th>Lie score</th>
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</tr>
<tr>
<td>I</td>
<td>6</td>
<td>C</td>
<td>9</td>
</tr>
<tr>
<td>Jp</td>
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<td>D</td>
<td>5</td>
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<tr>
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<td>E</td>
<td>3</td>
</tr>
<tr>
<td>L</td>
<td>4</td>
<td>F</td>
<td>9</td>
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<tr>
<td>M</td>
<td>6</td>
<td>G</td>
<td>7</td>
</tr>
<tr>
<td>C</td>
<td>9</td>
<td>P</td>
<td>10</td>
</tr>
<tr>
<td>TOTAL</td>
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<tr>
<td>MEAN</td>
<td>6</td>
<td></td>
<td>6.25</td>
</tr>
</tbody>
</table>

BCFSEI-2 standardised scores for Junior lie items found the mean score for combined sexes was 8.08 with 10 being the maximum score (the higher the score the less defensive/lying).

*Battle found that 94% of the subjects earned a score of 5 or better indicating that the majority of the sample in BCFSEI-2 displayed a lack of defensiveness when responding to lie items. An initial lie total of 188, with a mean of 6.06, was found during assessment of the global self-esteem for all 'middle school' groups, which fell above the expected boundary of 5 or more.

However, in our sample of the whole Middle School above, 28% of the scores of the 31 children shown above were 4 or less on the lie scale, showing a very high degree of lying/defensiveness. Far more disturbing is the finding that exactly 50% of the scores of the 31 children in the middle school population were 5 or less (5 is on the margin for the cut-off point), showing an extremely high degree of lying/defensiveness. Battle gives no lie scores for his ADHD sample in his appendix of normative tables.
It can be seen, simply by visual inspection of tables above that there is a great deal of variation between both self-esteem scores and lie scores for individuals in the Middle School. These range from self-esteem scores between 45-16 and lie scores between 10-1. Clearly there is initial cause for concern on the variability of both these measures. The range of global self-esteem is extremely variable, as are the lie scores. The self-esteem measures taken on the 31 children in the Middle School show that not all children with emotional and behavioural difficulties do indeed have low self-esteem (using Battle’s Culture Free Self-esteem Inventory-2, BCFSEI-2).

Questions arising from the above results in Table 15 above, as to just how accurate are the children’s perceptions of their own self-esteem, just how accurately are they reporting their own self-esteem and just how much ‘lying’ is actually taking place, (either due to trying to please the experimenter or deceiving themselves) were explored more fully in the discussion.
APPENDIX C  TABLE 19  ASSESSMENT AND PRE-TEST SCORES FOR GLOBAL SELF-ESTEEM

Results for the mean global self-esteem scores of assessment and pre-test of the experimental and comparison group before any interventions take place show that the scores are virtually reversed between assessment and pre-test even though no interventions took place.

<table>
<thead>
<tr>
<th>Expt.</th>
<th>Assessment</th>
<th>Pre-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>only</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>30</td>
<td>37</td>
</tr>
<tr>
<td>B</td>
<td>22</td>
<td>29</td>
</tr>
<tr>
<td>C</td>
<td>35</td>
<td>37</td>
</tr>
<tr>
<td>D</td>
<td>42</td>
<td>47</td>
</tr>
<tr>
<td>E</td>
<td>32</td>
<td>38</td>
</tr>
<tr>
<td>F</td>
<td>34</td>
<td>36</td>
</tr>
<tr>
<td><strong>MEAN</strong></td>
<td><strong>32.5</strong></td>
<td><strong>37.3</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comp.</th>
<th>Assessment</th>
<th>Pre-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>only</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>38</td>
<td>39</td>
</tr>
<tr>
<td>H</td>
<td>43</td>
<td>38</td>
</tr>
<tr>
<td>I</td>
<td>29</td>
<td>25</td>
</tr>
<tr>
<td>J</td>
<td>40</td>
<td>26</td>
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<td>K</td>
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<td>32</td>
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<td>37</td>
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<tr>
<td>N</td>
<td>*</td>
<td>36</td>
</tr>
<tr>
<td><strong>MEAN</strong></td>
<td><strong>36.85</strong></td>
<td><strong>32.25</strong></td>
</tr>
</tbody>
</table>

Results for the mean global self-esteem scores of assessment and pre-test of the combined experimental and comparison group before any interventions take place are 34.72. This is at the very low end of the ‘intermediate’ self-esteem score, (‘intermediate’ global self-esteem scores fall between 34 and 43).
APPENDIX D  TABLE 20  SOCIAL SELF-ESTEEM

Results in the Table below show the mean social self-esteem scores of both experimental and comparison groups, including pre-test scores before any interventions took place. The combined mean scores of the two groups at pre-test are 6.2. This constitutes a ‘intermediate’ social self-esteem score (‘intermediate’ social self-esteem scores fall between 6 and 7).

<table>
<thead>
<tr>
<th>Expt.</th>
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<th>3</th>
<th>4</th>
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<td>A</td>
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<td>5</td>
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<td>8</td>
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<td>B</td>
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<td>D</td>
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<td>E</td>
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<td>43</td>
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<table>
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<tbody>
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<td>7</td>
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</tr>
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<tr>
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<td>*</td>
</tr>
<tr>
<td>J</td>
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<td>6</td>
<td>6</td>
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<tr>
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<td>50</td>
<td>51</td>
<td>52</td>
<td>42</td>
</tr>
</tbody>
</table>

|       | 5.875    | 6.25| 6.375| 6.5 | 7 |

Non-parametric tests were used to compare the experimental with the comparison group on each occasion a social self-esteem measure was taken. No significant difference between the experimental and comparison groups on social self-esteem was found.

Parametric tests were then taken in order to look for differences over time and between the experimental and comparison groups for social self-esteem 1, 2, and 3 (after the social skills intervention, the co-operative learning intervention and the positive self-referent verbal statements intervention). This showed no significant difference in the way the treatments have affected the two groups.

No significant difference between the experimental and comparison groups on social self-esteem was found.
APPENDIX E  

TABLE 21  GENERAL SELF-ESTEEM

Results in the table below show the general mean self-esteem score of the combined experimental and comparison group, before any interventions took place was 13.3. This is at the low end of the 'intermediate' general self-esteem scores, ('intermediate' general self-esteem scores fall between 12 and 15).

<table>
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<td>10.625</td>
<td>12.875</td>
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</table>

Non-parametric tests were employed in order to look for differences over time and between the experimental and comparison groups for general self-esteem 1, 2, and 3 (after the social skills intervention, the co-operative learning intervention and the positive self-referent verbal statements intervention). This showed no significant difference in the way the treatments have affected the two groups.

There is, however, a slight drop in general self-esteem scores after intervention two. A possible explanation for this effect is that after the two treatments some children may have been brought 'face to face' with the fact that they do indeed have problems with social skills in general. They may have found it difficult to, for example, turn-take, share, etc., and the interventions of social skills and co-operative learning may have
reinforced this to them. Perhaps facing up to these realities may have caused a drop in their general self-esteem. Their general self-esteem then rose again, back to its level after the first intervention, at the completion of the third intervention of positive self-referent talk. The fact that a rise in general self-esteem occurred and continued to rise thereafter may be a result of the children accepting their limitations, but realising that after the third intervention they do indeed have positive aspects to their character, as had been demonstrated after the favourable positive of self-talk. This is, of course, pure speculation, but is ‘substantiated’ by the continued increase in general self-esteem at follow-up.
APPENDIX F      TABLE 22      BCFSEI-2 PARENTAL SELF-ESTEEM

Results shown in Table 19 below for the parental self-esteem scores of the combined experimental and comparison group mean pre-test scores before any interventions take place are 8. This is in fact a 'high' parental self-esteem score ('high' parental self-esteem scores are 8 or greater).

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<tr>
<th>Expt.</th>
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</tr>
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</table>

Non-parametric tests were employed to compare the experimental with the comparison group on each occasion a parental self-esteem measure was taken. No significant differences between the experimental and comparison groups on parental self-esteem were found.

Parametric tests were then employed in order to look for differences over time and between the experimental and comparison groups for parental self-esteem 1, 2, and 3 (after the social skills intervention, the co-operative learning intervention and the positive self-referent verbal statements intervention). This showed no significant difference in the way the treatments have affected the two groups.

Therefore, no significant difference between the experimental and comparison groups on parental self-esteem was found.

By visual inspection it can be seen that for the experimental group, parental self-esteem scores remain virtually unchanged after pre-test and throughout the three
interventions. If one includes follow-up scores, a decrease in parental self-esteem is found. This is what would be expected given the personal circumstances of some of the children at Bridgeview School and the nature of the interventions which were not designed to specifically impact on parental self-esteem. Due to the absence of any factors associated with parents the interventions would be unexpected to impact on their parental self-esteem.

Some children do not have parents and are, for example, in the care of the local education authority or are regular boarders at the school and are placed in foster care on a regularly changing basis. Some of the children live with ‘parents’ who are often single parents who have changing relationships with a partner. These parents give a very limited parenting experience to the children (as evidenced by child-care reports of home visits etc.). Their parents are often experiencing a very high level of difficulty themselves and do not spend a great deal of (positive/productive) time with their children. The children in both the experimental and comparison groups therefore may have found it difficult to relate to the concept of parental self-esteem.

This result also raises interesting questions about other self-esteem domains as measured by BCFSEI-2. Why does this domain of BCFSEI-2 parental self-esteem remain virtually static as predicted. One possible interpretation is that parental self-esteem is in fact static for the experimental group - the measure does exactly as it purports to do. If this is the case, and we have no reason to suspect otherwise, then why are all the other domain-specific and the global measures not giving such clear-cut results? In particular why for example are there such anomalies between the assessment and the pre-tests in global self-esteem?

The anomalies between the assessment and the pre-tests in other domains have been discussed in the main body of the study. One possibility is that the BCFSEI-2 has a problem of external validity with this specific population of emotionally and behaviourally disturbed children in relation to the general characteristics of the overall population of children labelled as emotionally and behaviourally disturbed. Is this a ‘true’ emotionally and behaviourally disturbed population or was the BCFSEI-2 validated on a ‘true’ emotionally and behaviourally disturbed population? The two issues of exactly what we are all measuring when we measure a so-called ‘emotionally and behaviourally disturbed’ population and the reason for multiple measures are very relevant to these results and have been extensively covered earlier in the main text.

These results, when compared to other assessment/pre-test domain-specific self-esteem results raise the question, is perhaps the BCFSEI-2, for whatever reason, not as accurate in measuring all domain-specific self-esteem as one would like for populations of children labelled ‘emotionally and behaviourally disturbed’?

For the comparison group it can be seen by visual inspection that the parental self-esteem scores remain virtually unchanged between assessment and pre-test. The scores then rise slightly (after the experimental group’s intervention) but continue to fall thereafter. At the four-month follow-up, they are again slightly elevated.
APPENDIX G  TABLE 23  BCFSEI-2 ACADEMIC SELF-ESTEEM

Results below show the mean academic self-esteem scores of the combined experimental and comparison group’s pre-test scores before any interventions take place was 7.0. This is on the border of the ‘intermediate’/’high’ academic self-esteem scores, (‘intermediate’ academic self-esteem being 7 and ‘high’ academic self-esteem scores being 8-9).

<table>
<thead>
<tr>
<th>Expt.</th>
<th>Pre-test</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
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6.6 6.6 7 6.83 4.5

<table>
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<tr>
<th>Comp.</th>
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<th>4</th>
</tr>
</thead>
<tbody>
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</table>

7.5 7.75 7 6.5 7.3

Non-parametric tests were used to compare the experimental with the comparison group on each occasion an academic self-esteem measure was taken. No significant differences between the experimental and comparison groups on academic self-esteem were found.

Parametric tests were then employed in order to look for differences over time and between the experimental and comparison groups for academic self-esteem 1, 2, and 3 (after the social skills intervention, the co-operative learning intervention and the positive self-referent verbal statements intervention). This showed no significant difference in the way the treatments have affected the two groups.

Again it can be seen by visual inspection that the statistically significant difference between the experimental and comparison group’s assessment scores occurred when no intervention took place.
APPENDIX II  

TABLE 24  

TOTALS AND MEANS FOR INDIVIDUAL DEFENSIVENESS/LIE SCALE

(The greater the score the less defensiveness, and therefore less lying.)
Scores include initial 'Assessment' scores taken on 10:5:95 where available.

By visual inspection it can be seen in the table below that more than one third of the experimental group’s mean scores fall outside 94% of the population who earn a defensiveness/lie score of 5 or better*. It can be seen that one third of the comparison group’s mean scores fall outside 94% of the population who earn a defensiveness/lie score of 5 or better*. It can also be seen by visual inspection that there is a high degree of defensiveness/lying for more than one third of the individual and/or combined populations of experimental and comparison groups*. However, the means for the experimental and comparison groups as a whole are within the acceptable limits.

<table>
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<th>Experimental</th>
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<table>
<thead>
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<th>Comparison</th>
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<th>Mean</th>
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</table>

As discussed earlier in the main body of the study, a degree of concern is expressed by these results. The issue of generalisability is perhaps relevant here. However this is impossible to test as none of the other measures used in the current study have lie scales. However, it could be postulated that the experimental and comparison groups may also exhibit a high degree of defensive/lie scoring on other self-rated instruments, although we have no evidence for this, only supposition, and could have possibly give very high defensive/lie scores on, for example, locus of control and peer preference scales.

Measures of reliability and validity are of course used in the above scales and these figures are quoted elsewhere in this study. However, we have seen that, with, for example, the BCFSEI-2 although the instrument has good levels of reliability and validity formulated on a very wide range of populations, including those with special
needs (ADHD), nevertheless issues of both internal and external validity and reliability have become apparent in connection with the current population under investigation.
APPENDIX I  TABLE 25  OBSERVATIONS ON POSITIVE, NEGATIVE AND ALONE BEHAVIOUR

The Table below shows the results of the Friday afternoon free-time half-hour sessions in raw and percentage terms.

Baseline 1-10, Social skills 11-17, Co-operative Puzzles 18-21, PSRVS 22-25.

<table>
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<th>Total</th>
<th>%</th>
<th>Negative</th>
<th>Total</th>
<th>%</th>
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</tbody>
</table>

By visual inspection it can be seen that positive behaviour increased, negative behaviour decreased and alone initially decreased then returned to its original level.
APPENDIX J

TABLE 26

OBSERVATIONS ON POSITIVE, NEGATIVE AND ALONE BEHAVIOUR ON FRIDAY AFTERNOON FREE-TIME HALF-HOUR SESSIONS AS % FOR EXPT GROUP ONLY

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Pre intervent baseline (10 sessions)</th>
<th>After intervent social skills (7 sessions)</th>
<th>After intervent co-op (4 sessions)</th>
<th>After intervent psvr (4 sessions)</th>
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</thead>
<tbody>
<tr>
<td>% positive</td>
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<td>53.75</td>
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<tr>
<td>% negative</td>
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<td>% alone</td>
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<td></td>
<td>100</td>
<td>99.99</td>
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</table>
Scores are expressed as a percentage of possible compliance occurrences.

Although no baseline was taken for positive self-referent verbal statements, the group on average made 48.37 positive self-verbal referents during each half-hour morning session. The number of positive self-verbal referents continued to increase throughout the intervention***.

<table>
<thead>
<tr>
<th>Social skills</th>
<th>Co-operative puzzles</th>
<th>Positive self-referent verbal statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>82.3</td>
<td>95</td>
<td>21</td>
</tr>
<tr>
<td>70</td>
<td>89</td>
<td>32</td>
</tr>
<tr>
<td>77</td>
<td>77.5</td>
<td>37.7</td>
</tr>
<tr>
<td>90</td>
<td>96</td>
<td>39.75</td>
</tr>
<tr>
<td>96.6</td>
<td>93</td>
<td>40.5</td>
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<td>97</td>
<td>97</td>
<td>43</td>
</tr>
<tr>
<td>95</td>
<td>92</td>
<td>44.8</td>
</tr>
<tr>
<td>96</td>
<td>86.5</td>
<td>53.2</td>
</tr>
<tr>
<td>88.5</td>
<td>79</td>
<td>58</td>
</tr>
<tr>
<td>95</td>
<td>91</td>
<td>61</td>
</tr>
<tr>
<td>99</td>
<td>93</td>
<td>39.5</td>
</tr>
<tr>
<td>97</td>
<td>78</td>
<td>57.7</td>
</tr>
<tr>
<td>97</td>
<td>89</td>
<td>44.8</td>
</tr>
<tr>
<td>96</td>
<td>98</td>
<td>53</td>
</tr>
<tr>
<td>85</td>
<td>97</td>
<td>56</td>
</tr>
<tr>
<td>95</td>
<td>97</td>
<td>47</td>
</tr>
<tr>
<td>84</td>
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<td>59</td>
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<td>79</td>
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<td>47</td>
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<td>81</td>
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<td>82</td>
<td>98</td>
<td>60.5</td>
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<td>79</td>
<td>98</td>
<td>61.5</td>
</tr>
<tr>
<td>1861</td>
<td>1896</td>
<td>1016</td>
</tr>
<tr>
<td>88.63</td>
<td>90.28</td>
<td>48.37***</td>
</tr>
</tbody>
</table>

It could be argued that as the 3 interventions on a prima-facie visual inspection had little effect on the dependent variables of self-esteem, locus of control etc., the children were not fully engaged in the interventions. These results demonstrate that they indeed were.
APPENDIX L  TABLE 28  RUTTER'S B2 BEHAVIOUR QUESTIONNAIRE, AS COMPLETED BY INDIVIDUAL TEACHERS, (NIKI)

The lower the scores, the better. A score of 9 or more is indicative of neurotic/antisocial behaviour.

The table below shows a very slight decrease in mean scores in the experimental group for Rutter's B2 Behaviour Questionnaire, showing behaviour had improved, as rated by one teacher, Niki, after the first social skills intervention. The mean scores continue to fall throughout the interventions. (* = no measures taken.)

<table>
<thead>
<tr>
<th>Expt.</th>
<th>Pre-test</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>10</td>
<td>9</td>
<td>6</td>
<td>8</td>
<td>*</td>
</tr>
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<td>B</td>
<td>10</td>
<td>9</td>
<td>6</td>
<td>7</td>
<td>*</td>
</tr>
<tr>
<td>C</td>
<td>14</td>
<td>18</td>
<td>9</td>
<td>8</td>
<td>*</td>
</tr>
<tr>
<td>D</td>
<td>14</td>
<td>12</td>
<td>11</td>
<td>13</td>
<td>*</td>
</tr>
<tr>
<td>E</td>
<td>16</td>
<td>10</td>
<td>10</td>
<td>7</td>
<td>*</td>
</tr>
<tr>
<td>F</td>
<td>8</td>
<td>8</td>
<td>5</td>
<td>2</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>72</td>
<td>66</td>
<td>47</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>11</td>
<td>7.83</td>
<td>7.5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comp.</th>
<th>Pre-test</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>*</td>
</tr>
<tr>
<td>H</td>
<td>18</td>
<td>13</td>
<td>7</td>
<td>9</td>
<td>*</td>
</tr>
<tr>
<td>L</td>
<td>10</td>
<td>11</td>
<td>5</td>
<td>8</td>
<td>*</td>
</tr>
<tr>
<td>J</td>
<td>17</td>
<td>15</td>
<td>8</td>
<td>6</td>
<td>*</td>
</tr>
<tr>
<td>K</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>*</td>
</tr>
<tr>
<td>L</td>
<td>18</td>
<td>11</td>
<td>6</td>
<td>10</td>
<td>*</td>
</tr>
<tr>
<td>M</td>
<td>11</td>
<td>10</td>
<td>6</td>
<td>6</td>
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</tr>
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<td>3</td>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>83</td>
<td>72</td>
<td>38</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10.375</td>
<td>9</td>
<td>4.75</td>
<td>6.625</td>
<td></td>
</tr>
</tbody>
</table>

The Table also shows a very slight decrease in mean scores in the comparison group for Rutter’s B2 Behaviour Questionnaire, showing behaviour had improved, as rated by one teacher, Niki, after the first social skills intervention (they obviously did not take part in the interventions). However the mean scores in the comparison group also continue to fall from pre-test scores throughout the interventions. Therefore, according to Niki the experimental group's behaviour improved (scores dropped) by 4.5 points but the comparison group's behaviour also improved (scores dropped) by 3.75 points.
APPENDIX M  TABLE 29  RUTTER'S B2 BEHAVIOUR QUESTIONNAIRE

INDIVIDUAL TEACHER RATINGS (PETE)

The Table below shows a decrease in mean scores, after pre-test, in the experimental group for Rutter's B2 Behaviour Questionnaire. This shows that behaviour had improved, as rated by one teacher, Pete, after the first social skills intervention. The mean scores continued to fall throughout the interventions.

<table>
<thead>
<tr>
<th>Expt.</th>
<th>Pre-test</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>22</td>
<td>14</td>
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<td>17</td>
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</tr>
<tr>
<td>B</td>
<td>17</td>
<td>16</td>
<td>18</td>
<td>23</td>
<td>*</td>
</tr>
<tr>
<td>C</td>
<td>31</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>*</td>
</tr>
<tr>
<td>D</td>
<td>24</td>
<td>22</td>
<td>25</td>
<td>17</td>
<td>*</td>
</tr>
<tr>
<td>E</td>
<td>33</td>
<td>25</td>
<td>21</td>
<td>30</td>
<td>*</td>
</tr>
<tr>
<td>F</td>
<td>16</td>
<td>13</td>
<td>13</td>
<td>16</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>143</td>
<td>112</td>
<td>116</td>
<td>125</td>
<td></td>
</tr>
<tr>
<td></td>
<td>23.83</td>
<td>18.6</td>
<td>19.3</td>
<td>20.83</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comp.</th>
<th>Pre-test</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>24</td>
<td>15</td>
<td>23</td>
<td>19</td>
<td>*</td>
</tr>
<tr>
<td>H</td>
<td>25</td>
<td>16</td>
<td>24</td>
<td>23</td>
<td>*</td>
</tr>
<tr>
<td>J</td>
<td>27</td>
<td>15</td>
<td>18</td>
<td>27</td>
<td>*</td>
</tr>
<tr>
<td>J</td>
<td>30</td>
<td>30</td>
<td>21</td>
<td>25</td>
<td>*</td>
</tr>
<tr>
<td>K</td>
<td>10</td>
<td>8</td>
<td>11</td>
<td>4</td>
<td>*</td>
</tr>
<tr>
<td>L.</td>
<td>36</td>
<td>15</td>
<td>21</td>
<td>30</td>
<td>*</td>
</tr>
<tr>
<td>M</td>
<td>28</td>
<td>16</td>
<td>29</td>
<td>28</td>
<td>*</td>
</tr>
<tr>
<td>N</td>
<td>11</td>
<td>7</td>
<td>12</td>
<td>5</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>191</td>
<td>122</td>
<td>159</td>
<td>151</td>
<td></td>
</tr>
<tr>
<td></td>
<td>23.875</td>
<td>15.25</td>
<td>19.875</td>
<td>18.875</td>
<td></td>
</tr>
</tbody>
</table>

By visual inspection the Table also shows a decrease in mean scores in the comparison group for Rutter's B2 Behaviour Questionnaire, showing behaviour had improved, as rated by one teacher, Pete, after the first social skills intervention (they obviously did not take part in the interventions). However the mean scores in the comparison group also continue to fall from pre-test scores throughout the interventions.

According to Pete the experimental group's behaviour improved (scores dropped) by 3 points but the comparison group's behaviour also improved even more (scores dropped) by 5 points.

Unlike Niki, Pete seemed to think that both groups' behaviour began and continued to deteriorate after the co-operative intervention. By visual inspection it can be seen that, of the two teachers, Niki and Pete, Pete consistently rated the children about twice as badly behaved. However their individual ratings do seem to be internally consistent.
Both teachers rated the experimental group as behaving better over time (lower scores), Pete by 3 points and Niki by 4.5 points. Pete, however, thought the comparison group had improved their behaviour by 5 points, whereas Niki thought the comparison group had not improved as much as the experimental group. These are mixed results especially as according to Pete all the children are neurotic/antisocial (9+) whereas Niki thought far fewer were.
Best copy available

Print close to the edge of the page and some cut off
<table>
<thead>
<tr>
<th>Number</th>
<th>Stimulus Item</th>
<th>Yes</th>
<th>No</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I spend a lot of time daydreaming.</td>
<td>☐</td>
<td>☐</td>
<td>General</td>
</tr>
<tr>
<td>2</td>
<td>Boys and girls like to play with me.</td>
<td>☐</td>
<td>☐</td>
<td>General</td>
</tr>
<tr>
<td>3</td>
<td>I like to spend most of my time alone.</td>
<td>☐</td>
<td>☐</td>
<td>General</td>
</tr>
<tr>
<td>4</td>
<td>I am satisfied with my school work.</td>
<td>☐</td>
<td>☐</td>
<td>Academic</td>
</tr>
<tr>
<td>5</td>
<td>I have lots of fun with my mother.</td>
<td>☐</td>
<td>☐</td>
<td>Academic</td>
</tr>
<tr>
<td>6</td>
<td>My parents never get angry at me.</td>
<td>☐</td>
<td>☐</td>
<td>Parental</td>
</tr>
<tr>
<td>7</td>
<td>I wish I were younger.</td>
<td>☐</td>
<td>☐</td>
<td>Lie</td>
</tr>
<tr>
<td>8</td>
<td>I have only a few friends.</td>
<td>☐</td>
<td>☐</td>
<td>General</td>
</tr>
<tr>
<td>9</td>
<td>I usually quit when my school work is too hard.</td>
<td>☐</td>
<td>☐</td>
<td>Social</td>
</tr>
<tr>
<td>10</td>
<td>I have lots of fun with my father.</td>
<td>☐</td>
<td>☐</td>
<td>Academic</td>
</tr>
<tr>
<td>11</td>
<td>I am happy most of the time.</td>
<td>☐</td>
<td>☐</td>
<td>General</td>
</tr>
<tr>
<td>12</td>
<td>I am never shy.</td>
<td>☐</td>
<td>☐</td>
<td>Lie</td>
</tr>
<tr>
<td>13</td>
<td>I have very little trust in myself.</td>
<td>☐</td>
<td>☐</td>
<td>General</td>
</tr>
<tr>
<td>14</td>
<td>Most boys and girls play games better than I do.</td>
<td>☐</td>
<td>☐</td>
<td>Social</td>
</tr>
<tr>
<td>15</td>
<td>I like being a boy / I like being a girl.</td>
<td>☐</td>
<td>☐</td>
<td>Academic</td>
</tr>
<tr>
<td>16</td>
<td>I am doing as well in school as I would like to.</td>
<td>☐</td>
<td>☐</td>
<td>Parental</td>
</tr>
<tr>
<td>17</td>
<td>I have lots of fun with both of my parents.</td>
<td>☐</td>
<td>☐</td>
<td>General</td>
</tr>
<tr>
<td>18</td>
<td>I usually fall when I try to do important things.</td>
<td>☐</td>
<td>☐</td>
<td>Lie</td>
</tr>
<tr>
<td>19</td>
<td>I have never taken anything that did not belong to me.</td>
<td>☐</td>
<td>☐</td>
<td>General</td>
</tr>
<tr>
<td>20</td>
<td>I often feel ashamed of myself.</td>
<td>☐</td>
<td>☐</td>
<td>General</td>
</tr>
<tr>
<td>21</td>
<td>Boys and girls usually choose me to be the leader.</td>
<td>☐</td>
<td>☐</td>
<td>Social</td>
</tr>
<tr>
<td>22</td>
<td>I usually can take care of myself.</td>
<td>☐</td>
<td>☐</td>
<td>General</td>
</tr>
<tr>
<td>23</td>
<td>I am a failure at school.</td>
<td>☐</td>
<td>☐</td>
<td>Academic</td>
</tr>
<tr>
<td>24</td>
<td>I find it hard to make up my mind and stick to it.</td>
<td>☐</td>
<td>☐</td>
<td>General</td>
</tr>
<tr>
<td>25</td>
<td>My parents make me feel that I am not good enough.</td>
<td>☐</td>
<td>☐</td>
<td>Parental</td>
</tr>
<tr>
<td>26</td>
<td>I never get angry.</td>
<td>☐</td>
<td>☐</td>
<td>General</td>
</tr>
<tr>
<td>27</td>
<td>I often feel that I am no good at all.</td>
<td>☐</td>
<td>☐</td>
<td>Social</td>
</tr>
<tr>
<td>28</td>
<td>I have many friends about my own age.</td>
<td>☐</td>
<td>☐</td>
<td>Academic</td>
</tr>
<tr>
<td>29</td>
<td>Most boys and girls are smarter than I am.</td>
<td>☐</td>
<td>☐</td>
<td>General</td>
</tr>
<tr>
<td>30</td>
<td>Most boys and girls are better than I am.</td>
<td>☐</td>
<td>☐</td>
<td>Parental</td>
</tr>
<tr>
<td>31</td>
<td>My parents dislike me because I am not good enough.</td>
<td>☐</td>
<td>☐</td>
<td>General</td>
</tr>
<tr>
<td>32</td>
<td>I like everyone I know.</td>
<td>☐</td>
<td>☐</td>
<td>Lie</td>
</tr>
<tr>
<td>33</td>
<td>Children pick on me very often.</td>
<td>☐</td>
<td>☐</td>
<td>General</td>
</tr>
<tr>
<td>34</td>
<td>I like to play with children younger than I am.</td>
<td>☐</td>
<td>☐</td>
<td>Social</td>
</tr>
<tr>
<td>35</td>
<td>I like to be called on by my teacher to answer questions.</td>
<td>☐</td>
<td>☐</td>
<td>Academic</td>
</tr>
<tr>
<td>36</td>
<td>I would change many things about myself if I could.</td>
<td>☐</td>
<td>☐</td>
<td>General</td>
</tr>
<tr>
<td>37</td>
<td>There are many times when I would like to run away from home.</td>
<td>☐</td>
<td>☐</td>
<td>Parental</td>
</tr>
<tr>
<td>38</td>
<td>I am as happy as most boys and girls.</td>
<td>☐</td>
<td>☐</td>
<td>General</td>
</tr>
<tr>
<td>39</td>
<td>I can do things as well as other boys and girls.</td>
<td>☐</td>
<td>☐</td>
<td>Social</td>
</tr>
<tr>
<td>40</td>
<td>I often feel like quitting school.</td>
<td>☐</td>
<td>☐</td>
<td>Academic</td>
</tr>
<tr>
<td>41</td>
<td>I worry a lot.</td>
<td>☐</td>
<td>☐</td>
<td>General</td>
</tr>
<tr>
<td>42</td>
<td>My parents understand how I feel.</td>
<td>☐</td>
<td>☐</td>
<td>Parental</td>
</tr>
<tr>
<td>43</td>
<td>When I have something to say, I usually say it.</td>
<td>☐</td>
<td>☐</td>
<td>General</td>
</tr>
<tr>
<td>44</td>
<td>I never worry about anything.</td>
<td>☐</td>
<td>☐</td>
<td>Lie</td>
</tr>
<tr>
<td>45</td>
<td>I am as nice looking as most boys and girls.</td>
<td>☐</td>
<td>☐</td>
<td>General</td>
</tr>
<tr>
<td>46</td>
<td>Other boys and girls are mean to me.</td>
<td>☐</td>
<td>☐</td>
<td>Social</td>
</tr>
<tr>
<td>47</td>
<td>I know myself very well.</td>
<td>☐</td>
<td>☐</td>
<td>General</td>
</tr>
<tr>
<td>48</td>
<td>I am doing the best school work that I can.</td>
<td>☐</td>
<td>☐</td>
<td>Academic</td>
</tr>
<tr>
<td>49</td>
<td>People can depend on me to keep my promises.</td>
<td>☐</td>
<td>☐</td>
<td>General</td>
</tr>
<tr>
<td>50</td>
<td>My parents think I am a failure.</td>
<td>☐</td>
<td>☐</td>
<td>Parental</td>
</tr>
<tr>
<td>51</td>
<td>I always tell the truth.</td>
<td>☐</td>
<td>☐</td>
<td>Lie</td>
</tr>
<tr>
<td>52</td>
<td>I need more friends.</td>
<td>☐</td>
<td>☐</td>
<td>Social</td>
</tr>
<tr>
<td>53</td>
<td>I always know what to say to people.</td>
<td>☐</td>
<td>☐</td>
<td>Lie</td>
</tr>
<tr>
<td>54</td>
<td>My teacher feels that I am not good enough.</td>
<td>☐</td>
<td>☐</td>
<td>Academic</td>
</tr>
<tr>
<td>55</td>
<td>My parents love me.</td>
<td>☐</td>
<td>☐</td>
<td>Parental</td>
</tr>
<tr>
<td>56</td>
<td>I never do anything wrong.</td>
<td>☐</td>
<td>☐</td>
<td>Lie</td>
</tr>
<tr>
<td>57</td>
<td>Most boys and girls are stronger than I am.</td>
<td>☐</td>
<td>☐</td>
<td>Social</td>
</tr>
<tr>
<td>58</td>
<td>I am proud of my school work.</td>
<td>☐</td>
<td>☐</td>
<td>Academic</td>
</tr>
<tr>
<td>59</td>
<td>I often get upset at home.</td>
<td>☐</td>
<td>☐</td>
<td>Parental</td>
</tr>
<tr>
<td>60</td>
<td>I am never unhappy.</td>
<td>☐</td>
<td>☐</td>
<td>Lie</td>
</tr>
</tbody>
</table>

**Figure 1.** Form A. Stimulus items and key.
<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do you believe that most problems will solve themselves if you just don't fool with them?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Are you often blamed for things that just aren't your fault?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Do you feel that most of the time it doesn't pay to try hard because things never turn out right anyway?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Do you feel that most of the time parents listen to what their children have to say?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. When you get punished does it usually seem its for no good reason at all?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Most of the time do you find it hard to change a friend's (mind) opinion?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Do you feel that it's nearly impossible to change your parent's mind about anything?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Do you feel that when you do something wrong there's very little you can do to make it right?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Do you believe that most kids are just born good at sport?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Do you feel that one of the best ways to handle most problems is just not to think about them?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Do you feel that when a kid your age decides to hit you, there's little you can do to stop him or her?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>YES</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>-----</td>
</tr>
<tr>
<td>12. Have you felt that when people were mean to you it was usually for no reason at all?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Most of the time, do you feel that you can change what might happen tomorrow by what you do today?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Do you believe that when bad things happen they just are going to happen no matter what you try to do to stop them?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Most of the time do you find it useless to try to get your own way at home?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Do you feel that when somebody your age wants to be your enemy there's little you can do to change matters?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Do you usually feel that you have little to say about what you get to eat at home?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Do you feel that when someone doesn't like you there's little you can do about it?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Do you usually feel that it's almost useless to try in school because most other children are just plain smarter than you are?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Are you the kind of person who believes that planning ahead makes things turn out better?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Most of the time, do you feel that you have little to say about what your family decides to do?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
 Peer rating scale 

<table>
<thead>
<tr>
<th>Name</th>
<th>Work With</th>
<th>Play With</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hugh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campbell</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sam</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keith</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sara</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glyn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brian</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thomas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graunt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Palmer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Appendix B: Behavior Rating Form (BF)

Does this child adapt easily to new situations, feel comfortable in new settings, enter easily into new activities?

<table>
<thead>
<tr>
<th>Always</th>
<th>Usually</th>
<th>Sometimes</th>
<th>Seldom</th>
<th>Never</th>
</tr>
</thead>
</table>

Does this child hesitate to express his opinions, as evidenced by extreme caution, failure to contribute, or a subdued manner in speaking situations?

<table>
<thead>
<tr>
<th>Always</th>
<th>Usually</th>
<th>Sometimes</th>
<th>Seldom</th>
<th>Never</th>
</tr>
</thead>
</table>

Does this child become upset by failures or other strong stresses as evidenced by such behaviors as pouting, whining, or withdrawing?

<table>
<thead>
<tr>
<th>Always</th>
<th>Usually</th>
<th>Sometimes</th>
<th>Seldom</th>
<th>Never</th>
</tr>
</thead>
</table>

How often is this child chosen for activities by his classmates? Is his companionship sought for and valued?

<table>
<thead>
<tr>
<th>Always</th>
<th>Usually</th>
<th>Sometimes</th>
<th>Seldom</th>
<th>Never</th>
</tr>
</thead>
</table>

Does this child become alarmed or frightened easily? Does he become very restless or jittery when procedures are changed, exams are scheduled or strange individuals are in the room?

<table>
<thead>
<tr>
<th>Always</th>
<th>Usually</th>
<th>Sometimes</th>
<th>Seldom</th>
<th>Never</th>
</tr>
</thead>
</table>

Does this child seek much support and reassurance from his peers or the teacher, as evidenced by seeking their nearness or frequent inquiries as to whether he is doing well?

<table>
<thead>
<tr>
<th>Always</th>
<th>Usually</th>
<th>Sometimes</th>
<th>Seldom</th>
<th>Never</th>
</tr>
</thead>
</table>

When this child is scolded or criticized, does he become either very aggressive or very sullen and withdrawn?

<table>
<thead>
<tr>
<th>Always</th>
<th>Usually</th>
<th>Sometimes</th>
<th>Seldom</th>
<th>Never</th>
</tr>
</thead>
</table>

Does this child deprecate his school work, grades, activities, and work products? Does he indicate he is not doing as well as expected?

<table>
<thead>
<tr>
<th>Always</th>
<th>Usually</th>
<th>Sometimes</th>
<th>Seldom</th>
<th>Never</th>
</tr>
</thead>
</table>

Does this child show confidence and assurance in his actions toward his teachers and classmates?

<table>
<thead>
<tr>
<th>Always</th>
<th>Usually</th>
<th>Sometimes</th>
<th>Seldom</th>
<th>Never</th>
</tr>
</thead>
</table>

To what extent does this child show a sense of self-esteem, self-respect, and appreciation of his own worthiness?

<table>
<thead>
<tr>
<th>Very strong</th>
<th>Strong</th>
<th>Medium</th>
<th>Mild</th>
<th>Weak</th>
</tr>
</thead>
</table>
## A CHILDREN'S BEHAVIOUR QUESTIONNAIRE

### APPENDIX

**CHILD SCALE B**

TO BE COMPLETED BY TEACHERS

Below are a series of descriptions of behaviour often shown by children. After each statement are three columns: “Doesn’t Apply”, “Applies Somewhat”, and “Certainly Applies”. If the child definitely shows the behaviour described by the statement place a cross in the box under “Certainly Applies”. If the child shows the behaviour described by the statement but to a lesser degree or less often place a cross in the box under “Applies Somewhat”. If, as far as you are aware, the child does not show the behaviour place a cross in the box under “Doesn’t Apply”.

1. Please put ONE cross against EACH statement. Thank you.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Doesn’t Apply</th>
<th>Applies Somewhat</th>
<th>Certainly Applies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Very restless. Often running about or jumping up and down. Hardly ever still</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>2. Truants from school</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>3. Squirm, fidgety child</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>4. Often destroys own or others’ belongings</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>5. Frequently fights with other children</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>6. Not much liked by other children</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>7. Often worried, worries about many things</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>8. Tends to do things on his own—rather solitary</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>9. Irritable. Is quick to “fly off the handle”</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>10. Often appears miserable, unhappy, tearful or distressed</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>11. Has twitches, mannerisms or ticks of the face or body</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>12. Frequently sucks thumb or finger</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>13. Frequently bites nails or fingers</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>14. Tends to be absent from school for trivial reasons</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>15. Is often disobedient</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>16. Has poor concentration or short attention span</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>17. Tends to be fearful or afraid of new things or new situations</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>18. Fussy or over-particular child</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>19. Often tells lies</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>20. Has stolen things on one or more occasions</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>21. Has wet or soiled self at school this year</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>22. Often complains of pains or aches</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>23. Has had tears on arrival at school or has refused to come into the building this year</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>24. Has a stutter or stammer</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>25. Has other speech difficulty</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>26. Bullies other children</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

Are there any other problems of behaviour?

<table>
<thead>
<tr>
<th>Signature: Mr./Mrs./Miss.</th>
<th>□</th>
</tr>
</thead>
<tbody>
<tr>
<td>How well do you know this child? Very well</td>
<td>□</td>
</tr>
<tr>
<td>Moderately well</td>
<td>□</td>
</tr>
<tr>
<td>Not very well</td>
<td>□</td>
</tr>
</tbody>
</table>

THANK YOU VERY MUCH FOR YOUR HELP