THE UNIVERSITY OF HULL

AN EVALUATION OF LOCAL EDUCATION AUTHORITY OFF-SITE SPECIAL UNITS FOR DISRUPTIVE PUPILS

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by

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SUMMARY OF THESIS SUBMITTED FOR Ph.D DEGREE

BY KEITH TREVOR LITTLE

ON

AN EVALUATION OF LOCAL EDUCATION AUTHORITY

OFF-SITE SPECIAL UNITS FOR DISRUPTIVE PUPILS

This thesis is concerned to evaluate Local Education Authority Off-Site Special Units for Disruptive Pupils.

By reviewing the relevant literature, and by ascertaining the views of Local Education Authorities, the thesis develops the argument that schools are ambivalent in their reasons for referring disruptive pupils to Off-Site Special Units. Whilst maintaining primary concern for the pupils' reform, a greater concern seems to be evident for the removal of recalcitrant pupils in the best interests of the referring school. Either way, the decision to refer the pupil to an Off-Site Special Unit probably rests upon a failure to appreciate the causes of disruptive behaviour, which in practice are less likely to be explained in pathological terms than in institutional ones. In consequence, the idea that a suitable measure for evaluating units is to be found in rates of successfully reintegrating pupils from units back into mainstream schools is open to question.

Since many pupils indicate a desire to return to mainstream school whilst others express a wish to enter employment where recognised patterns of good behaviour are necessary, a criterion for evaluating Off-Site Special Units remains the ability of the Unit to produce behaviour change in pupils attending the Units.

The dictum is employed in the present thesis. The Bristol Social Adjustment Guides and a Behaviour Checklist, developed by the writer from one used by the ILEA, are used as before and after measures to show that the behaviour of pupils referred to three Off-Site Special Units in one LEA, does improve during the period of intervention. The behaviour of matched control pupils who remain in mainstream schools does not show a similar improvement.

The comments of pupils in the Off-Site Special Units confirm that there are positive gains in the Units.
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My thanks are also due to my tutor and colleagues for their support, encouragement and advice.
AN EVALUATION
OF
LOCAL EDUCATION AUTHORITY OFF SITE SPECIAL UNITS
FOR
DISRUPTIVE PUPILS

INTRODUCTION

Some pupils in schools display disruptive behaviour and this can create problems for teachers.

In many cases the problem is mild and is accommodated as part of the teachers' working day. In other instances, the behaviour displayed by the pupils is so bizarre, aggressive or difficult that psychiatric or medical treatment is called for.

Between these two extremes there resides a group of pupils, who are relatively small in number, and yet whose disruptive behaviour can be a source of great distress to teachers and a source of great demand upon teachers' time and energy.

It is these pupils who are most likely to be referred to Local Education Authority off-site special units.

A consideration of the circumstances in which pupils who display disruptive behaviour are referred to off-site special units, suggests that the emphasis in many
school-based responses to disruption is on a deficit model of the pupil. Such a model offers compensatory or remedial education in order to reconcile the disruptive pupil to the existing demands of the school. The assumption is that disruptive behaviour is a direct associate of rule breaking, indiscipline and punishment.

It is against the background of this line of thinking that schools and Local Education Authorities make demands upon off-site special units.

The notion of a deficit model of the pupil is compounded by the involvement of educational psychologists in the process of the referral of disruptive pupils to off-site special units.

A situation, therefore, arises wherein children are in danger of being labelled as disturbed or maladjusted, less because it is necessarily a realistic reflection of the pupils genuine needs and more because of the needs of the school. Indeed, it is probably the case that many children who are subsequently referred to off-site special units, attract attention in the first instance because they are disturbing to teachers; whether they are disturbed in themselves, is another matter.

It is, however, possible that as Huxley (1987) has suggested, there is a 'mismatch' underpinning the school careers of pupils who display disruptive behaviour, in so
far as the expectations of teachers and schools on the one hand and the pupils on the other, may not coincide.

Exploring the concept of 'mismatch' allows those seeking explanations for pupil disruptive behaviour to shift attention away from the simplistic process of heaping responsibility upon the pupil to a wider search for causative factors.

Some of these causative factors may reside within the structure and system of the school and if, therefore, an adequate conceptualisation of behaviour problems in schools is to be developed, then schools must begin to consider the possibility of adjusting the school regime to suit the needs of these pupils, as opposed to the reverse process of always assuming that the pupil must necessarily undergo modification.

Certainly, schools are in the main content to retain the school system unchanged and to resolve the problem of disruption by removing disruptive pupils to off-site special units. As a result, off-site special units have proliferated. The evolution of a policy of establishing off-site special units, whilst unsystematical, was both widespread and rapid and by the end of the 1970s, special units had become a commonplace feature of the provision of most Local Education Authorities.

It was never entirely clear, however, whether this
represented a response to a new problem or a new method of dealing with an old one. The popular belief was that disruption in schools was no longer a comparatively isolated phenomenon but a new and ubiquitous malaise of our times, reflecting a general decline in behavioural standards. Following this line of thinking, the establishment of special units seems to have been a development forced upon the education system.

It is as likely, however, that changes in the schools themselves created a situation wherein schools were less competent and less prepared to accommodate a cadre of disruptive pupils.

If, therefore, special units are to be viewed as anything more than merely local expedients and/or responses to the most obvious and strident demands of the schools, then questions about their existence must be addressed. As it is, they are surrounded by unresolved contradictions about their place within the education system, which emanate from ideological conflicts between assumptions that have become galvanised into the system.

With this in mind, the present study endeavours to consider the relevant literature which throws light upon the place of off-site special units within the education system at the present time, before proceeding to evaluate such off-site special units.
Some difficulty arises, however, in any attempt to evaluate special units.

Special units are by definition special. If they are, therefore, to be examined and consequently justified as a part of the educational system of the United Kingdom, then presumably they must be shown as providing a distinctive service to particular and identified categories of pupils within an educational environment significantly different from that which these pupils would otherwise experience. It surely follows that such significant differences as are observable within the off-site special unit, should be intelligible against a recognisable rationale or philosophy of education.

It is by no means clear that this is the case at the present time. Local Education Authorities are at pains to point out that off-site special units are something more than mere containment facilities and that the unit must be other than a dumping ground for disruptive and difficult pupils. The irony is that as soon as we move beyond the custodial view of units to define them in terms of providing remedial facilities for pupils, the implication is that the pupils referred to such units are in need of remedial attention. In short, that responsibility for the causes of disruptive behaviour reside most essentially within the pupil - a point which has previously been questioned.
One possible alternative stance might be to see the off-site special unit as a genuine alternative to mainstream education, providing a special facility in which something new can be provided.

If this is the case, then it should prove possible to learn from the experiences of the off-site special units and to recreate certain features of them within Comprehensive Schools in general, thereby creating a comprehensive system of education which recognises the needs of all pupils, including those whose current disaffection is responded to with disruptive behaviour.

A significant point remains, however, in that if pupils are referred to off-site special units as a result of disruptive behaviour which arises from disaffection and disillusionment with school procedures, then it is difficult to see how the usually accepted criterion of good levels of reintegration, as a measure of success of a unit, can possibly apply.

It is, of course, the case that most agencies of social control in our society appear to be better equipped for detecting, apprehending and confining the deviant than they are at bringing him or her back from the institution to the community. Application of this dictum to off-site special units, has led some educational authorities to determine that a key improvement required in association with units, is the modification of procedures such as to
permit better reintegration rates of pupils from units back into mainstream schools.

Clearly, this does not provide an adequate measure by which off-site special units can be evaluated, despite the fact that it is used in just such a way in many studies of units.

On the other hand, it has to be said that pupils in Local Education Authority off-site special units frequently express the desire to return to their former schools. In any case, if these pupils are to proceed to further education or to paid employment, then it is necessary that they recognise that they must display behaviour acceptable to their environment. This is, of course, irrespective of the causes of their initial disruptive behaviour.

It would appear, therefore, that the most helpful criterion for considering the effectiveness of off-site special units, might be found in terms of measured improvement in the behaviour of pupils who are referred to the units. This remains so, whether or not the improvement is maintained, in the long term, after return by a pupil to mainstream schooling.

The ensuing study thus proceeds on this basis, utilising before and after intervention behaviour test measures to compare whatever changes in behaviour may be evident.
within a group of experimental pupils who spent time at off-site special units, with a group of control pupils who also displayed behaviour problems but who remained in school.

This model has been applied to those pupils passing through three off-site special units within one Local Education Authority, over a two-year period, following a pilot study involving two off-site special units within another Local Education Authority, over a one-year period.

No similar attempt to assess the progress of disruptive pupils through Local Education Authority off-site special units is known to the writer. To this extent, the results may assist in the process of determining the present and future place of such units within the armoury of Local Education Authority provision.
REVIEW OF LITERATURE

1. Introduction to the Literature

Off-site units offering provision for disruptive pupils are by no means a recent phenomena. Such units have existed in New York, for example, since 1940 (Kvaraceus and Ulrich, 1959). It is, however, only since the late 1960s and the early 1970s that Local Education Authority off-site special units for disruptive and disaffected pupils began to proliferate in this country (DES, 1978).

References to disruptive behaviour in English Schools are much older. Leach (1911), reports how, "Thomas Birchwood, scholar at Canterbury in 1314 A.D. confessed to a charge of violently assaulting the vice-monitor, Master Walter." (pp. 258-9). Similarly, Orme (1973) cites an Oxford schoolmaster of 1500 A.D. who complains about pupils in his charge making excuses to go to the toilet and instead going home, much as their twentieth century counterparts are sometimes inclined to do. Orme goes on to indicate that mediaeval schoolboys were frequently involved in attacks on the public and in assaults on staff or other pupils. Referring to more recent historical times, Lowndes (1937), comments that during the later decades of the nineteenth century, "Every year there were many bruised shins and even broken limbs caused by rough boys kicking young women teachers." (p. 18). He recounts the anguish of a perplexed clergyman who wrote in 1878,

A scholar (who) some days ago brought small
apples into school and threw some at the girls during the sewing lesson; he was of course told to desist but persisted in repeating the offence. Summoned to the desk for corporal punishment, he threw himself on the floor and said aloud, 'damn you, I'll mark your shins if you come any nearer.' (p. 18).

Given the long history of literature on disruptive behaviour compared to the much more recent contributions on special units, it is hardly surprising that a great deal more has been written about the former than the latter.

It is, however, surprising that the considerable volume of literature on disruptive behaviour appears not to have played a notably significant role in influencing the inception or development of off-site special units for disruptive pupils on any widescale basis or in any structured way. Indeed, it has been suggested that off-site special units were introduced as a panic response to a problem which was little understood (Platt, 1969). It is similarly suggested by Lawrence, Steed and Young (1984a), that so little of real value has been gleaned from the literature on disruptive behaviour and applied to the thinking underpinning off-site special units, that the units may well be an inappropriate response to the problem of disruptive behaviour.

This is not to say that there is nothing to learn from the wider literature on disruptive behaviour that would not help us to understand better what off-site special units all about, but rather that there is little
evidence to suggest that the exercise has been undertaken.

The charge is clear and implies that a gulf probably exists between explanations of the causes of disruptive behaviour on the one hand, and the establishment and development of off-site special units on the other.

In such circumstances, the current practice of removing disruptive pupils to off-site special units is open to question. Indeed, comments from some local education authorities suggest that because questions have now been asked about the validity of off-site special units, such units should perhaps be abandoned.

The primary aim of reviewing relevant literature on the subject is, therefore, to determine the extent to which local education authorities would be acting advisedly in disbanding off-site special units for disruptive pupils, or whether a case can be made for their retention.

From what has already been said, it follows that it would not be sufficient to pursue this matter by concentrating solely on those references specific only to off-site special units. If a critical appreciation of the causes of disruptive behaviour is not reflected in the 'raison d'être' of off-site special units, then a serious discrepancy may exist between what off-site units are able to achieve and the expectations and demands made on them by schools and local education authorities.
A justification for the continuation of off-site special units, or indeed their discontinuation cannot, therefore, be considered until literature has first been explored that throws light upon this discrepancy.

To this extent, it is necessary to review literature relating to the possible causes of disruptive behaviour since the way in which the initial cause of disruptive behaviour is perceived by schools and local education authorities may influence them in respect of their expectations about the appropriate response which they believe that special off-site units should produce. Similarly, the causes of disruptive behaviour must be viewed with some clarity if off-site special units are to make any sort of effective response.

It is at this point, however, that the complexity of the issue becomes apparent, because there is by no means clear agreement about where the causes of disruptive behaviour reside. Skinner (1983) suggests that it is common amongst teachers and educational administrators to ascribe the behavioural difficulties of pupils to psychological and constitutional factors, implying that such behaviour reflects social and environmental deprivation, compounded by individual bloody-mindedness.

On the other hand, recent research by Steed (1985), suggests that disruptive behaviour in schools is a complex interaction of individual, familial, sub-cultural and school factors, which cannot be
explained adequately by concentrating on any one factor in isolation.

According to this view, the behaviour causing difficulty in schools has to be analysed as a phenomenon involving a relationship between the personality of the child, learning difficulties, the personality and classroom skills of the teacher, institutional factors such as the curriculum and the organisation of the school, and wider society-based issues. The point is reiterated and summarised by Reid (1985a) who stresses the need for the approach to an understanding of pupil disaffection to be multi-disciplinary.

The approach to understanding disruptive behaviour pointed out by Skinner (1983) contrasts markedly to the stance taken by both Steed (1985) and Reid (1985a). The expectations imposed upon off-site special units are notably different according to which viewpoint is accepted. Clearly, the relative merits of these and other standpoints must, therefore, be pursued through the available literature before a criterion for evaluating off-site special units may be proposed.

Everhart (1987) reiterates the nature of the problem by arguing that disruptive behaviour displayed by pupils and the responses to this behaviour by schools and educational authorities, can be viewed from at least three broad perspectives.

One is a macrolevel of analysis that centres on the
societal and institutional factors that create and influence pupil behaviour in schools.

A second is a microlevel of analysis which focuses on the behaviour of the individual pupil, who is seen as an autonomous entity who has variously learned and internalised 'correct' norms of behaviour. When it appears that pupils have not internalised such norms, attempts are made to resocialise them to adopt more acceptable behaviours.

Thirdly, behaviour problems in the classroom can be understood from a social-ecological perspective by focusing on the context of schooling itself. That is to say, we can understand disruptive behaviour as part of the ongoing dynamic created by organisational participants as they proceed through the day within the school as a complex social organisation.

Everhart (1987) thus exposes the central problem inherent in an analysis of the function of off-site special units as places to which disruptive pupils are referred. Clearly, much depends on the stance taken in endeavouring to explain the nature and causes of disruptive behaviour. Only when this has been considered is it possible to reflect upon the purposes of off-site special units and to comment upon their relevance within the educational system.

With this in mind it is possible to take a particular attitude towards the selection of relevant literature.
which may serve to throw light on the subject.

It has not been considered relevant to explore references to escalating levels of pupil disruption and classroom violence since there is a danger in many such references that emotional and political issues over-ride the learning objectives. For similar reasons it has not been seen as useful to pursue the large number of popular press reports on the subject.

Again, in an attempt to concentrate on pupil disruption as opposed to the broader issue of disaffection, references to school refusal and absenteeism have been omitted, except where they prove directly relevant to a particular case in point. This remains so despite the fact that some pupils are referred to off-site special units by virtue of persistent unauthorised absence from school.

A substantial volume of work written prior to 1980 has also been excluded on the grounds that its reference to highly specific aspects of the problem is unhelpful or because it has become overtaken by developments in the more empirical approach to understanding disruptive behaviour that is displayed in a growing proportion of contemporary pieces of literature.

Having determined those references which may safely be excluded it is possible to consider those fundamental lines of thinking that should be pursued in order to arrive ultimately at an understanding of that which
constitutes a successful and viable local education authority off-site unit for disruptive pupils.

In the first instance the definition of disruptive behaviour is important since the way in which the nature of problem behaviour is perceived is likely to produce the tenor of a local education authority's possible responses.

The literature relating to attempts to define disruptive behaviour suggests the generation of the supposition held by many observers that disruptive pupils are necessarily either maladjusted or deviant. This attitude to disruption tends to lead to the justification of a response founded on a treatment and/or penal model.

It is, therefore, logical to proceed from a consideration of definitions of disruptive behaviour to a review of the development of off-site special units in order to see if local education authorities have indeed established off-site units on the basis of a particular philosophy.

Once units had been established, unit growth was rapid and units proliferated at a time when schools were facing changes which, it was felt, made them less able or prepared, to cope with difficult pupils on-site.

In the absence of a central policy, the literature implies that units developed in an 'ad hoc' way with a primary function of being centres to which schools could
off-load their more difficult pupils. Given, however, the numbers of pupils involved and the substantial nature of this emerging educational resource, it is understandable that some local education authorities have vigorously protested against off-site units being seen merely as dumping grounds.

The argument evident in the literature is, in consequence, that, for the most part, units have emerged as places within which substantial numbers of pupils could both be contained for the benefit of the referring school and as a facility from which a pupil may be ultimately returned, chastened and improved.

There are, of course, two quite different expectations placed upon the units as a result of this dual line of thinking, and it is not, therefore, surprising if units have developed against a base line of some confusion.

It is worth pursuing the confused circumstances of special units further through the literature, by considering their place within the education system, as they became widely available to schools by the late 1970s and into the 1980s. A review of the literature shows that considerable confusion remains about the legal status of off-site special units.

The present dubious legal standing of off-site units may be explained by the desire of local education authorities to enable referrals to be made easily and for pupils to remain on the roll of the school of origin.
and for the possibility of quick reintegration to be facilitated. Such expediencies, however, make important assumptions about what units may be expected to achieve. The fundamental premise here seems to reiterate the proscription that units are in business to support schools by improving the behaviour of difficult pupils and then by returning them, suitably reformed, to mainstream education.

The available literature confirms that the Inner London Education Authority has done much to improve the policies and procedures which are deemed necessary to ensure that this process works efficiently. To this extent, it may be said that they present a model to other local education authorities.

It is less clear, however, that the policies and procedures relating to the use of off-site special units for disruptive pupils are as much in need of honing as in need of questioning.

It might be expected that further light could be shed on this particular point by considering the literature associated with empirical attempts designed to evaluate the units.

The problem here, however, is that the underlying assumption by schools and local authority officers about what off-site units are expected to achieve tends to influence the criteria utilised in evaluation endeavours.
In these circumstances, it is necessary to consider the evaluation criteria further. Clearly, unless the nature and causes of pupils' disruptive behaviour are apportioned with some accuracy and the role of the off-site special unit considered accordingly, it would be misleading in the extreme to draw conclusions about the value of such units from those studies designed to evaluate them.

In general, evaluation studies have tended to give considerable weight to the notion of the successful reintegration of pupils back into their former schools as a criterion for judging units. Again, this makes certain assumptions about the causes of disruptive behaviour and about the role of the unit in responding to the pupils referred to it.

It may be that a more careful analysis of the available literature allows these assumptions to be questioned. It is, therefore, reasonable to review next that literature which looks at what the unit business is all about. This is helpful in widening the question of the extent to which an off-site special unit may be understood as a school support system, a dumping ground for recalcitrant pupils, a place for remedial educational treatment, a centre for behaviour modification, a parallel school, a location for pupils with major disorders or simply as an institution of punishment.
Each of these viewpoints imposes different expectations upon the staff of the unit and they all imply that the fault for whatever difficulties have arisen lies within the pupil or his/her home circumstances. The process of referring pupils to special units rarely appears to seek explanations that extend beyond this.

A review of literature under the heading of 'recourse to off-site special units' offers the opportunity to consider further the idea that the continued maintenance of units may be the result of strategic decisions to support the referring school first and foremost, with the needs of the referred pupils second in the order of priorities. Schools and local education authorities are increasingly under pressure to maintain standards in schools and off-site units provide a suitable location to which problem pupils may be off-loaded. Whatever the terminology used to describe the unit, the concept of the unit as a dumping ground for difficult pupils is clearly emphasised.

In such circumstances, it is perhaps surprising that the process by which disruptive pupils are referred to off-site special units and the rates of successful return to mainstream education are deemed such important issues.

Other literature is, in consequence, reviewed in order to ask why the questions of referral and reintegration, figure so prominently in discussions about the effectiveness of off-site special units. The debate
would seem to imply that if the unit is doing its job properly then reintegration rates will be high. Also that reintegration rates may be adversely influenced by a haphazard approach to referral. If either point is to have credence then it must be assumed that the pupils' behaviour at referral is open to effective change and remediation. This has already been questioned and the lack of relevance of the notion of necessary successful reintegration is thus open to exposure by the literature.

Exposition of the idea that successful reintegration is necessarily a criterion by which units may be satisfactorily evaluated, and the associated questioning of 'within pupil' explanations as the only account of the cause of disruptive pupil behaviour, leads to the need to search for evidence supporting other possible interpretations of such behaviour.

It is a natural step, therefore, to next review relevant literature which looks closely at the influences that schools bring to bear upon pupils. There is now some two decades of reported evidence suggesting that schools may make a significant contribution to the levels of disaffected behaviour manifested by pupils. This literature needs to be pursued in order to examine the possible evidence suggesting that the school should be called upon to assume a greater responsibility for the causes of pupil disruptive behaviour than has hitherto.
been the case.

Certainly such a conclusion seriously affects the criteria by which off-site units for disruptive pupils may be judged.

To say, however, that the school should be held responsible, at least in part, for the causes of the disruptive behaviour found within it, raises a number of different issues.

It may be that the school is similar to many other places where large numbers of people collect together to pursue particular aims, in that they may all serve to create disruptive behaviour. This possibility must not be overlooked and the relevant literature is pursued in the belief that something of value can be learned from the industrial and business work-place which may prove of value to school and special unit alike.

Yet more revealing, however, is the further possibility that some schools make a contribution to the levels of disruptive behaviour found within them whilst others do not, or if they do, less so. If it can, indeed, be shown that some schools display high levels of pupil disruptive behaviour compared with other schools and that this cannot be explained in terms of marked differences in the nature of the schools' catchment areas, then the implications are most significant. It is clearly important to consider what the literature on this topic has to say and to go on from there to ask
what, if anything, is different about those schools with especially high or especially low levels of disruption.

Such differences may centre around the school rule system and the consequences of rule infringement, or they may centre around aspects of the school curriculum and the question of the relevance of some parts of the curriculum to some pupils' needs. If pupils feel that the rule system is unjustly administered or that the school curriculum leaves them little prospect of ever tasting achievement and success, then disruptive behaviour could become an understandable response. These issues are pursued through the literature.

An approach to appreciating the nature of disruptive behaviour and its causes which considers the possible influences of the school, is a most illuminating one and serves to justify the role of the off-site special unit in terms of being a haven for the pupil who has suffered at the hands of the school. It is thus apparent that a review of the relevant literature on the related issues of rule infringement and the influences of the curriculum is important.

To consider in this way the influences on behaviour of school rules and curriculum, is to begin to see the spectrum of disruptive behaviour from the perspective of the pupil. It is always useful to consider the consumers point of view in assessing the highlights and discrepancies of any system and the school is no
exception. Therefore, literature specific to the pupil's viewpoint on the role of the school in producing disruptive behaviour is pursued, especially where this draws distinctions and comparison between specific facets of mainstream school on the one hand, and those of off-site special units on the other.

It could, of course, always be that the pupils' collective viewpoint is biased by the fact that pupils who display disruptive behaviour tend to come from a narrow band of social class or ethnic background. Certainly teachers' comments tend to suggest that social class and ethnic background are significant influences accounting for the development of pupil disruptive behaviour in schools. This is explored in the available literature to ascertain the extent to which environmental and racial origins may indeed be important contributory factors in the process of disruption or whether they are, at the end of day, no more than deflective devices used by teachers, consciously or unconsciously, to divert attention and responsibility away from the school and its staff.

This takes the argument full circle, for it brings the debate back to the initial comment that the definition of disruption employed and the way in which a pupil's behaviour is perceived, tend to produce the ethos of the response. Disruptive behaviour is determined by teachers, operating as they do within the confines of a demanding system. It is much simpler for teachers,
rightly or wrongly, to look for explanations of disruptive behaviour from outside of that system rather than from within it.

A check on the extent to which schools must bear a responsibility for the disruptive behaviour found within them is carried out by pursuing literature relating to what life involves for pupils who have been identified as disruptive and who have been referred to off-site special units. This allows for contrasts to be established between the daily working systems of off-site special units and mainstream schools.

It is revealing to ask what it is that pupils acquire from off-site special units. Clearly, if they acquire little or nothing of value, then it is difficult to see what role, other than as a sinbin or dumping ground, units can possibly serve. On the other hand, if pupils attending such units feel that they have made gains in academic or behavioural or social aspects of their schooling, then it is pertinent to ask why these same gains could not have been made in the mainstream school of origin. That such benefits were not evident for these pupils when they were in mainstream schools, reiterates the possibility that schools may well fail to meet the needs of some pupils, with resulting disaffection and consequent displays of disruptive behaviour. According to this view, the off-site special units may be seen less as a dumping ground or facility of correction and more as a haven in which pupils may
experience a sense of being wanted, of tasting success and restoring the confidence and ability necessary to cope with the inadequacies of the school system without resorting to disruptive behaviour.

Having raised the matter of the nature of life for pupils in an off-site special unit, it is reasonable to conclude by considering what the literature has to say about the disadvantages and advantages of units. This is a most relevant way of bringing the review of literature to a culmination since it provides an opportunity to synthesise the main elements of the argument running through the literature. On the face of it the case against the continuation of off-site special units is damming, and certainly there are clear inadequacies in the curriculum and the resourcing of off-site special units.

The literature maintains that so long as off-site special units are seen as establishments for pupils who are unacceptable to schools, then an ethos is generated and a criterion for evaluation established to fit the ethos. This could work to produce an apparent conceptual inadequacy in units. In practice, it may be that the inadequacy is less in the concept of the unit and more in the way in which it is perceived by those who refer pupils to it.

To condemn units on the basis of their inadequacies and to propose that pupils who display disruptive behaviour,
remain in ordinary schools, is to assume that the school is necessarily suited to all pupils' needs and ignores the mounting evidence that for some pupils the school may carry a heavy responsibility for a given pupil's disruptive behaviour. It ignores also, the real possibility that the off-site special unit, with all its problems and limitations, may still offer a useful resort for some pupils whose experience of school is such as to deem it inappropriate and unacceptable.

It is thus possible at this point to pull together the threads of the argument developed through the review of relevant literature.

The argument may be summarised in the statement that it is recognised that pupils may gain from the experience of spending time at a unit, but schools are ambivalent in their reasons for referring disruptive pupils to off-site special units. Whilst maintaining primary concern for the pupils' reform and correction, a greater concern seems to be evident for the removal of recalcitrant pupils in the best interests of the referring school. Either way, the decision to refer the pupil to an off-site special unit probably rests upon a failure to fully appreciate the causes of disruptive behaviour, which in practice are less likely to be explained in pathological terms than in institutional ones.

In such circumstances, the interests of the referring school and the interests of the referred pupil are not
necessarily the same. Yet they come together in the common setting of the off-site special unit.

With this in mind, the idea that a suitable measure for evaluating units is to be found in rates of successfully reintegrating pupils from units back into mainstream schools, is open to question and an alternative measure needs to be sought.

The ensuing literature review proceeds in the belief that by considering that literature which throws light on the argument set out above, a sufficiently realistic understanding of the off-site special unit will be developed to permit useful comment to be made on its place within the education system and a satisfactory evaluative device recommended accordingly.
2. **Defining Disruptive Behaviour**

A consideration of the definitions generally used in connection with disruptive behaviour is employed in this section in order to show the way in which attempts to define such behaviour may demonstrate a particular conceptualisation of the problem. Such definitions tend to lead to the assumption that disruptive pupils are either maladjusted or deviant. A particular attitude towards disruptive behaviour is thereby engendered and produces a response based on a treatment model.

Several writers have proferred definitions of disruptive behaviour.

Lowenstein (1975) defined disruptive behaviour as any behaviour short of physical violence which interferes with the teaching process, and/or upsets the normal running of the school. Parry (1976) gives no such attention to distinguishing disruptive behaviour from physical violence and defines the disruptive child as one who knowingly or unknowingly effectively and frequently disrupts his own education and the education of others.

These definitions are interesting if for no other reason than they illustrate the rather loose way in which many teachers use terms such as disruptive behaviour or misbehaviour, to describe a wide variety of pupil activities, ranging from the trivial to the serious.

Upton and Gobell (1980) point out that such terms are
commonly applied to all kinds of pupils, including the relatively small number who manifest psychiatric illness, for although such pupils may be 'maladjusted', it is often only through their disruptive behaviour in school that they become identified as such.

This is an important point because it highlights the extent to which there is no clear distinction between the actions that make up the misbehaviour of maladjusted pupils and the actions of other disruptive pupils. The definition of a display of disruptive behaviour depends, after all, on the perception of those who observe the behaviour. This particular point is central to the definition of disruptive behaviour made by Galloway, Ball and Seyd (1982), who define disruptive behaviour as any behaviour which appears problematic, inappropriate and disturbing to teachers.

The notion that behaviour may or may not be defined as disruptive in accordance with the perception of the beholder, leads to a debate about what may or may not constitute normal behaviour. Some so-called disruptive behaviour, may be perceived by the pupil to be a normal healthy reaction to an intolerable situation (Winnicott, 1972).

Lawrence, Steed and Young (1981) endeavour to cover the point when they suggest that disruptive behaviour is that, "... which seriously interferes with the teaching process and/or seriously upsets the normal running of the school. It is more than ordinary misbehaviour ...
it includes physical attacks and malicious destruction of property." (P. 8).

A definition of the concept of that which is 'ordinary' or 'normal' is, however, open to debate and the issues involved have been delineated by a number of authors, (Redlich, 1952; Leighton, et al. 1957; Zax and Cowen, 1972; and others).

Whilst it is not relevant here to enter into this debate in detail, it is necessary to point out that the issues involved impinge directly on the work of the teacher who must respond to a pupil who displays non-conforming behaviour. Presumably, the teacher who determines that a pupil's behaviour deviates from normal behaviour, by definition, equates the pupil with deviancy. Again, it would be tedious to open up a discussion of deviance in any detail, but it is notable that the concept of deviance does incorporate a labelling orientation closely associated with a punitive approach. The point is stressed by Lawrence, Steed and Young (1986) who express considerable concern about the penalogical implications of referring disruptive pupils to off-site special units.

Hargreaves et al. (1975) suggest that equating disruption with deviance has two significant implications.

Firstly, deviance is seen as a question of social definition. It is argued that any act cannot, by
itself, be deviant. Rather deviance only arises when someone defines a particular act as deviant. Secondly, deviance is seen as a relative phenomenon. If a deviant act is an act that breaks some rule, then since rules vary between different groups, acts which are deviant (i.e. which break rules) in one group, may not be deviant in another.

By implication, the study of deviance focuses on social processes and the mechanisms of social control rather than individual pathology. Rains et al. (1975) sum up the implications succinctly, when they comment that the "labelling perspective shifts the theoretical concern from the etiological approach to deviant behaviour (how persons come to act in ways that are different, disapproved of, abnormal), to the question of how deviants are controlled ...".

The relevance for the school teacher, who is faced with a disruptive pupil, is important for we see that whilst Rutter et al. (1970) are emphatic that, "there are important (if slight) differences in the concepts underlying ... terms (p.47), the practicing teacher is obliged to give less attention to a definition of disruptive behaviour and more to the treatment or control of it.

It is, perhaps, for this reason that Topping (1983) argues that, "Disruptive is a semantically loose vernacular word and serves its function best by so remaining, provided this is understood." (p. 11).
It is easy to see how this reasoning has proceeded to support the concept of the off-site special unit and has detracted from a more analytical assessment of that which constitutes disruptive behaviour. It would be helpful, therefore, to look closely at the circumstances in which special units have emerged and developed and to consider the extent to which attempts to define disruptive behaviour have influenced the unit business.
3. **The Development of Off-Site Special Units**

In view of what has gone before, it might be expected that a particular philosophical standpoint, will be seen to underpin the concept of off-site special units. The literature confirms that in the absence of a centralised policy, units developed in an ad hoc way essentially to support schools which were at the time undergoing changes and which had become less able as a result to cope with problem pupils on-site. This implies that off-site special units developed for the primary reason to be centres to which mainstream education could off-load its disruptive pupils. The literature confirms that given the numbers of pupils involved, a substantial proportion of the school population and of the resources of the education system are involved in this process.

An Inner London Education Authority working party on off-site support centres (ILEA, 5042, 1985) found a "Bewildering array of off-site provision ..." (p. 6). When the working party attempted to discover the number of centres and the number of teachers employed in them, they found difficulty in obtaining final figures, which is indicative of the confused situation existing in this area of the Authority.

It is probable, however, that at the end of the Summer Term 1984, approximately 400 teachers were employed in 176 off-site units dealing with 1183 pupils (plus 815
part-time pupils) within the Inner London Education Authority. These figures include Intermediate Treatment Centres, Voluntary Off-site Centres, Educational Guidance Centres, Section 56 Social Services Units and Tutorial Classes as well as off-site school support units.

Some indication of the rapidity of growth of off-site units can be seen in the findings of a series of national surveys. In 1977, the DES obtained information from 69 of the 96 English Local Education Authorities, showing that there were 239 units with a joint population of 3,962 pupils (DES 1978). In 1980, ACE published the results of its survey which indicated a special unit population of 5,957 (ACE 1980). The Social Education Research Project (Ling and Davies 1984) provided data on off-site units in England and Wales indicating a population of about 7,000 pupils.

Ling and Davies' questionnaire survey of a sample of 132 off-site units found that 16 per cent operated under the auspices of social service departments or voluntary agencies, 56 per cent were said to be part of the special education sector and 27 per cent had some other administrative background.

The Inner London Education Authority Report (ILEA, 5042, 1985) indicates that between 1978 and 1982, the provision of on-site units and off-site centres doubled within the area of the Inner London Education Authority.
Authority at a time when the overall school population fell by 73,000, although it would be necessary to analyse the age breakdown of the school population before any significance could be attached to the point.

A survey carried out by the Advisory Centre for Education (1986b) was able to note the existence of 439 units, even though only just over half of the Local Education Authorities responded to the request for information.

The Advisory Centre for Education points out that "... the remarkable efforts of the Inner London Education Authority account for a significant part of this increase. The ILEA now has 226 units offering places to 3,800 students, a total which nearly equals the number of places available in England and Wales as a whole in 1977" (P. 16).

In 1977, H.M. Inspectors visited about half of the units known to exist in English Local Education Authorities, (DES, 1978). The oldest unit had been established as early as 1960, although the vast majority had come into being in the years 1973 to 1977, with 62 units being provided in the peak year of 1974.

In attempting to explain this growth, H.M. Inspectors found that educational administrators, psychologists, heads and teachers in schools and those in units
offered a number of suggestions. It was felt that the need for off-site units could be attributed to general social decline, including such issues as family breakdown, lack of respect for authority, a fall in moral standards and a widespread lack of self-discipline.

Since there is substantial evidence to suggest that disruptive behaviour was no new phenomena in the 1970s, it is surprising to find these various criteria being cited as justifications for the development of off-site special units.

It seems more likely that changes in the school at this time, including particularly the impersonal nature of some large schools and the prevalence of external examination courses in comprehensive schools, both of which were cited in the 1978 DES report, created school systems less able to cope effectively with the disruptive behaviour found within them.

The fact, however, that family breakdown, lack of respect for authority and a fall in behavioural standards, were cited to HMIs as reasons giving rise to the need for off-site special units, reiterates the emerging argument that the belief system underpinning the developing of such units arises from the assumption that disruptive pupils are either maladjusted or deviant. The responsibility for disruptive behaviour, it is maintained, must rest upon
the pupil, or more widely on the inadequate social environment from which he or she emanates. Either way, the comprehensive school, as emerging in the 1970s, needed the support of off-site units in order to provide an establishment to which these disaffected pupils could be off-loaded.

It is clear from what has gone before that local education authority off-site units for disruptive pupils have not developed under any single national directive, and neither do they operate under any single nationally acceptable name, nor is their intake clearly definable within any strictly identifiable category of pupil.

Whatever its historical justification, this diversity reflects ad hoc developments lacking in central direction. If we add to that the distinct empires which units often constitute and whose border crossings have indeterminate customs regulations, then there is scope for duplication and confusion in most Local Education Authority's provision (Mongan, 1987).

Because LEAs are not required to provide data on units, as they are for example in respect of special schools, it is impossible to say how many teachers work in them. Surveys are faced with the limitations of non-response rates and unreliable respondents. Nevertheless, there are certain reasonably reliable clues. The HMI finding of 321 teachers in 108 units visited (DES, 1978), is consistent with the finding of
Ling and Davies (1984) that three-quarters of the units in their survey had between two and four teachers. They identified about 400 units and suggested that they accommodate over 7,000 pupils at ratios rarely exceeding 6 to 1. It seems reasonable to draw these strands together and to suggest that considerably more than a thousand teachers are working in off-site units.

Given these numbers, it is evident that off-site units have become a significant portion of local authority education provision. It is, therefore, worth pursuing further the reasons giving rise to this provision.

Several pressures were instrumental in the development of support centre policies. The impersonal nature of some large schools and the imposition of an external examination system on a wide cross-section of pupils, have already been referred to. Other important issues were the raising of the school-leaving age, rapid teacher turnover in the early part of the 1970s, uncertainties in schools following re-organisation, the decision to abolish corporal punishment and the ending of the eleven-plus transfer examination.

The raising of the school-leaving age inevitably caused problems for schools which now had to cope with pupils who had no desire to attend school. Urban secondary schools in the early 1970s suffered from a particularly high rate of teacher turnover. The
difficulty in retaining experienced teachers is illustrated by an Inner London Education Authority survey (Little, 1977) carried out in the mid 1970s, which showed 87 per cent of women teachers had been teaching in their school for less than 5 years. The abolition of corporal punishment in some Local Education Authorities in the 1970s increased teacher pressure for alternative methods of dealing with disruptive behaviour. The ending of the eleven-plus selection examination and the abolition of selective grammar schools resulted in increased pressure from parents who were anxious to avoid their child's education being disrupted by other pupils' uncontrolled behaviour in the classroom.

By the late 1960s and 1970s it had become evident that against the background of these changes the existing special school facilities could not cope with the older and more overtly threatening pupils who create disruption in schools. Secondary schools had changed sufficiently to become places less able to accommodate their disruptive pupils and it was necessary, therefore, for them to be placed outside the school. As Galloway, et al. (1982) have put it, either the special school system must expand, or separate facilities must be created for this new category of 'special' pupil.

The inference would seem to be that given changes in schools, additional use of off-site provision was
necessary in order to take the pressure off the schools. It is understandable that in these circumstances, the national response in developing off-site special units for disruptive pupils was such as to be described by Platt (1969) as a panic measure to a situation that was not fully understood.

The Inner London Education Authority responded more positively than other local education authorities. Indeed, as a result of the pressures outlined above, the ILEA, in consultation with headteachers, made available £1,000,000 to support initiatives to deal with the problem. Suggestions for plans were invited from divisions, schools and others, as a result of which over 300 proposals for schemes were submitted, virtually all of which were accepted and no attempt made to impose a blueprint. Funding was allocated evenly to the Divisions of the Inner London Education Authority, without reference to size or their ranking on the priority area index. The emphasis throughout was for each Division of the Authority to respond to local needs. Schools and Divisions were given little guidance on the formulation and content of proposals.

It was clearly hoped that a coherent divisional approach would emerge from the proposals. In practice, proposals came forward from individual schools, branches of the service such as the Education Welfare Service and whole Divisions.

Even so, it was clear that across the ILEA what was
wanted was a resource which could be used to place pupils off-site and which could serve a consortia of schools or a Division of the Authority.

As a result, the Inner London Education Authority produced broad guidelines, 'Procedures for School Support Centres' (ILEA, 9214, 1979), on how these centres were to operate. The guidelines clearly state that off-site provision is an extension of the school or schools because the pupils remain on the rolls of the parent-school and will be under the jurisdiction of headteachers or senior members of staff whose pupils will be attending the centre.

The Inner London Education Authority (ILEA, 9214, 1979) has indicated that the two main aims of the off-site centres set up under the initiative are:

(i) to help pupils to adjust to the demands of living and working in a community, both in school and in the outside world:

(ii) to provide each pupil with a curriculum consistent with the aims in (i) above and appropriate to the pupils individual educational needs. Where possible, studies should be related to the curriculum being followed in the school of origin, and include preparation for external examinations, where this is relevant.

Behavioural difficulties, however, may be associated with particular learning deficiencies and it would be hoped that success in this would
influence general behaviour. The overall purpose would be educational with the object of returning the pupil to the mainstream of education.

The programme was seen essentially as an intervention programme aimed at both reducing the incidence of breakdown of relationships in the school which led to suspension and expulsion and to providing support to pupils and schools so that positive relationships may be re-established. The Inner London Education Authority guideline stressed that pupils referred to units must not be those who can most properly be helped by special education provisions. This would, it was emphasised, be inappropriate for these pupils and a disservice to those for whom the units were intended (ILEA, 9214, 1979).

It is worth pursuing this point further since these underlying assumptions may be expected to percolate through to find an entrenched place in the 'raison d'etre' of units within the contemporary education system.
4. **The Place of Units Within the Educational System - with Particular Reference to the Inner London Education Authority**

There is a lack of clarity about the place of special units within the educational system and of the demarcation between special units and special education. The 1981 Education Act has not helped this situation and although there may be good reason for retaining some vagueness about special units, since it probably permits more effective use to be made of them, there is an inherent presumption that units are in business to apply an intensive remedial approach to pupils deemed recalcitrant in the mainstream system. The ILEA has taken firm action to remove some of the obvious critical elements of the system and recognises that much can be learned from the special units that may be applicable to mainstream schooling. It is less evident, however, that any LEAs have begun to question the fundamental nature of the units as centres designed to improve the behaviour of disaffected pupils prior to returning them to their former schools.

The dubious legality of special units under the 1944 Education Act remained unquestioned until the Rampton Report (DES, 1981). It is surprising that their legality has rarely been challenged in that they provide a method of excluding children from their mainstream classrooms, sometimes for several years, without the safeguards of a special educational referral.
There is, thus, considerable confusion in respect of the legal situation pertaining to off-site special units. As local education authorities started to consider the problems presented by their disruptive pupils, Education Officers gradually realised that it was usually cheaper and always administratively easier to open special units for disruptive adolescents than expand the special school system. As Galloway et al. (1982) put it,

The reason lies in the small print of the 1944 Education Act ... The distinction was largely administrative. Units were faced with fewer staffing constraints in the form of recommendations on pupil/teacher ratios in special schools. They could be more flexible in their admission and discharge procedures. Pupils could always remain on the roll of their original school to which it was theoretically hoped they would return (p. 60).

Unfortunately, the 1981 Education Act has compounded the problem rather than clarified it by excluding centres or units from the formal assessment procedure. Whereas pupils attending all recognised special schools or classes must have the 'protection' of a Statement, this is not the case for disruptive pupils.

Galloway and Goodwin (1987) have suggested that this clause may be seen in two ways. Cynically it could be seen as an indication of the government's recognition that the primary function of special education, at least for one group of pupils, is to assist the smooth administration of the ordinary school system. Critics of special schooling and of the remedial departments
in ordinary schools have long argued that the provision exists more for the benefit of teachers and pupils in the mainstream than for that of pupils removed from the mainstream.

A further plausible explanation of this state of affairs is that it was initially intended that there should be a quick pupil turnover in off-site units. After the short, sharp, shock of admission, intensive remediation and therapy, pupils would be returned to their schools of origin, suitably chastened and well adjusted. Against the background of such thinking, it would follow that the labyrinthine complexity of formal assessment and statementing procedures would make short term admission very difficult, if not impossible, to arrange. Hence, disruptive pupils must, it is argued, be excluded from it.

It is also likely, however, that the government simply did not recognise the inconsistencies inherent in attempts to distinguish on administrative grounds between disruptive pupils and pupils whose behaviour required special schooling. Presumably the government was advised by HMI and LEA advisors and yet it was precisely these people, who for administrative convenience, had been drawing this distinction under the provision of the 1944 Education Act. The effect of the 1981 Act was to enshrine in law a spurious distinction that had developed previously on an ad hoc basis.
This has undoubtedly served to add further to existing confusion about the 'raison d'etre' of the off-site unit.

Even so, an attempt had been made from an early stage to consider what the unit business was all about.

In 1975, the DES established the National Centre for Information and Advice on Educational Disadvantages, which was expected to maintain a watching brief over developments in this vast area, but the extent of the brief was such that the emerging problem of disruptive pupils and the rapid growth in provision made to cope with them received only passing attention from the Centre (Tattum, 1982).

In fact, the centre was closed in 1980 but in any event, the effect had been that the expansion of units has been ad hoc, with no co-ordinating body available to provide guidance. Hence, many units have been set up without due regard to the central problems of admission, curriculum, staff or to reintegration to mainstream schooling.

Thus, off site units came into being without central direction and such is the resulting variety of provision that it is not obvious that units share common aims and objectives. In recent years, however, the Inner London Education Authority in particular has sought to bring greater structure to this situation.
It would be useful, therefore, to consider in some
detail, recent and current attempts by the ILEA to
produce a coherent system of off-site special units.

Although the Inner London Education Authority
guidelines (ILEA, 9214, 1979) are clear about the aims
and objectives of the off-site centres, they are
unclear and inadequate in a number of respects. More
responsibility has devolved to the teachers in charge
of the units than was intended, with the influence of
mainstream school headteachers being limited by time
and management committee meetings being poorly
attended. No provision had been made for parental,
community or lay representation on management
committees. The involvement of parents before
admission to an off-site centre has not been
obligatory. Assessment procedures and criteria for
referral are not specified in the guidelines. It is,
of course, anomalous now that the 1981 Education Act
on special educational needs lays down detailed
procedures for admitting a pupil into a special
school, that access to off-site provision can still be
made directly from a school. Again, no clear
direction is given in the guidelines on the
curriculum to be followed in the off-site units,
other than that the curriculum arrangements should
relate closely to the needs of the individual pupil
and that care should be taken to give access to as
wide a curriculum as is practicable. This would not
seem to be a very adequate directive for off-site
Finally, the pattern of the working day in off-site units is often complicated by the fact that teachers must remain on duty during breaks and non-teaching periods, with resultant changes in the length of the school day. The ILEA has a statutory duty to provide education for ten sessions weekly during the school term for all pupils from 5 - 16 years of age and there is evidence to suggest that off-site units may be contravening this requirement.

It is not surprising that the Inner London Education Authority Working Party on Off-Site Support Centres (ILEA, 5042, 1985), recommended that the ILEA produce new guidelines on off-site support centres, taking into account the above significant issues and addressing the fundamental question of the role of such units.

The observation of the Inner London Education Authority Education Officer on the report of the working party (ILEA, 5042, 1985) together with illustrations of ways of implementing its recommendations on a divisional basis (ILEA, 5141, 1985) was presented to sub-committee in March 1985. This report was approved as a basis for consultation on the future pattern of off-site support centres and other provision for children with difficulties.

Copies of ILEA Report 5042, (1985) and ILEA Report 5141, (1985) were distributed to relevant bodies for
comment and their responses were incorporated in ILEA Report S7035, (1987), which makes firm and important recommendations for changes in the provision for disruptive pupils in off-site units from September, 1987.

During the time between the publication of ILEA, Report 5141, (i.e. March 1985) and ILEA, Report S7035 (February 1987), a number of important and related reports had made known their findings.

The Hargreaves Committee (ILEA Hargreaves Report, 1984), the Metcalf Working Party, (ILEA 5042, Metcalf Report, 1985) and the Fish Committee, (ILEA, Fish Report, 1985), all produced reports describing the isolation of some support centres from mainstream schools and the lack of co-ordination between different provisions being offered to children with behavioural problems. Yet all three reports recognised that there is a continuing need for some off-site provision for the foreseeable future.

The committee of enquiry into special education, published in 1985 and known as the Fish Report, (ILEA, Fish Report, 1985) met under a brief,

To review the range, quality and coherence of provisions to meet special educational needs in the Authority ... particularly in the light of the Warnock Report and the 1981 Education Act and the Authority's initiative to promote equal opportunities and combat under-achievement of children from all backgrounds ... (p. 1).

The emphasis in these terms of reference on equal
opportunities and under achievement is especially significant in that they provide a context which was notably absent from the Warnock Report, (1978) and from the 1981 Education Act.

In general terms, this implied that existing special education services might not be providing pupils with the same opportunities that they might have in the mainstream. Further, that the well documented disproportionate representation in special schools of boys and of minority groups, might reflect unequal opportunities and also that the need for special education might result from under-achievement.

Anticipations that the Select Committee established in 1987 to look at the workings of the 1981 Education Act might take up these issues and recommend changes, proved to be unfounded (DES 1987). The equal opportunities arguments in favour of integration are largely dismissed by the Select Committee which opted for the status quo.

Whilst references are specifically to pupils with special educational needs, implying in the main pupils with learning difficulties as distinct from behavioural problems, the wider importance lies in the unambiguous statement of underlying principles, viz.,

The aim of education for children and young people with disabilities and significant difficulties are the same as those for all children and young people ... Disabilities and significant difficulties do not diminish the right to equal access to and participation in, society. (ILEA, Fish Report, 1985, para.
Special off-site units, by their very nature, cannot provide equal opportunity to participate in and contribute to the life and work of a school.

The Fish Committee recognised that integration does not necessarily ensure that pupils are not socially isolated and recommends that integration requires that additional provision may be needed to support the pupil with special needs whilst remaining in mainstream education. A point reiterated by Coulby and Harper (1985).

In the light of the Fish Committee's proposals, together with the recommendations of ILEA, Report 5042, (1985) and ILEA, Report 5141, (1985), it was logical for the Review of Off-Site Support Centres and Other Support to Children with Difficulties: proposals for future organisation (ILEA, Report S7035, 1987), to make recommendations for the continuation of off-site units in the ILEA but with important modifications.

Thus the Review recommends major changes in referral procedures such that both parents and pupils are allowed to participate in the referral process. It is further proposed that all referrals to off-site centres should be co-ordinated divisionally, thus helping to prevent inappropriate referrals and assisting in the monitoring of the level and nature of referrals.
The single assessment form for referring children to off-site centres also includes provision for collecting information on the sex and ethnic background of referred pupils. Recognising that children from Afro-Caribbean communities are over-represented in off-site support centres, it is felt necessary that information relating to ethnic background is collected and used to monitor the Authority's equal opportunities policy and provide information useful and beneficial to the pupil in the referral process.

To avoid the element of chance operating in the placement of pupils, it is proposed that an Admissions Panel be established in each ILEA Division to monitor referrals and in some cases to decide on the most appropriate provision for the pupil.

Again, the Inner London Education Authority (ILEA, Report S7035, 1987) stresses the importance of reviewing pupils' progress in off-site units, including careful consideration concerning whether a pupil requires full assessment under Section 5 of the 1981 Education Act. These reviews will be held at six weekly or termly intervals and will consider the pupil's readiness for reintegration into mainstream school. Parents may request assessment at any time and for pupils in their final year of compulsory schooling reviews should seek to encourage them to continue their education through the range of post
sixteen provision available.

The curriculum of the off-site unit, which has attracted wide criticism, was given detailed attention by the ILEA, Report S7035, (1987). It was felt that many of the shortfalls in the curriculum may be overcome by co-operating with other institutions, such as schools and colleges of further education and also that work experience placements may be appropriate.

In any case, the ILEA, Report S7035, (1987) makes the point that,

For many years, off-site centres have been pioneering new approaches to the curriculum for disaffected pupils. They have been successful in devising curricula which encourage attendance among those who would otherwise have missed out, through non-attendance or suspension, in their fourth and fifth year schooling. (P. 1, Appendix G9).

The review goes on to state that studies of curriculum including a recent survey of the advisory team for off-site units, suggests that in many ways off-site workers have achieved these results by methods which are now being widely adopted in mainstream schools, through the proposals of Improving Secondary Schools (ILEA, Hargreaves Report, 1984) and other initiatives.

The Inner London Education Authority Advisory Team for off-site units has initiated working parties to prepare booklets on various subject areas to help teachers working with disaffected pupils in small groups. By the beginning of 1987, some twenty booklets had been produced with the intention that
production of the booklets should lead to and run parallel to staff INSET programmes.

With effective induction courses for off-site unit staff and on-going opportunities for staff development and in-service training, a good many of the criticisms levelled against off-site units are met by the ILEA, Report S7035, (1987).

Evidence of progress from crisis management to more preventive approaches is to be found in the Inner London Education Authority's various reviews of its support centre provision. The ILEA has recommended that there should be a reduction in the number of off-site units and that they should cover a wider catchment area such that a broader curriculum can be offered. (ILEA, 5042, 1985), (ILEA, 5141, 1985).

Larger units, it is argued, will help to reduce the feeling of professional isolation that many teachers who work in them experience. Units with more than three teachers will also ease release for attendance on in-service courses, case study meetings, visits to schools, etc.

It may be argued that there is a need to change the thinking about where units actually fit into a local authority's provision for children with special needs, and larger units can become centres of alternative education within state provision (Tattum, 1986). The aim must surely be to convince pupils and parents that
what is offered is worthwhile in educational terms.

It is not surprising that when referring to the situation existing in the late 1970s the HMI report of ILEA units commented that the whole programme of off-site units for disruptive pupils needed reappraisal (HMI 1980).

Such a reappraisal is being undertaken by the Inner London Education Authority and other Local Education Authorities will no doubt look closely at the outcome. Many criticisms of units are being met but it is less clear that the central issue of the 'raison d'etre' of off-site units has yet been grasped.

The literature reviewed above supports the contention that off-site special units developed against the background of changes in Secondary Schools and on the assumption that the behaviour of problem pupils could be improved if these pupils were removed temporarily, off-site.

It is not clear, however, precisely where the demarcation exists between special education and special units for disruptive pupils and this has certainly not helped to clarify the role of special units.

This is probably a key factor accounting for the extent to which the growth and development of off-site special units appear to be underpinned by the belief
that disruptive pupils could be removed to off-site units for intensive remedial treatment followed by return to mainstream schooling, suitably readjusted.

Efforts made to improve the system would seem to be aimed at refining the structure outlined above and not at questioning the fundamental criterion underpinning it.
5. **Evaluation Studies**

The literature on evaluation studies is reviewed in order to expose the extent to which such studies are only meaningful so long as the criterion for evaluation can be supported. In short, attempts to evaluate special provision for disruptive pupils must depend on the perception of that which constitutes disruptive behaviour and its causation. If that perception is developed from the premise that units are designed to support schools and correct the behaviour of pupils referred to them then only if the premise is correct will the evaluation studies be of value.

Dawson (1980) has indicated that despite the range of suggestions about how a response may be made to the problem of disruptive behaviour, and indeed the sums of money expended on implementing these suggestions, many remain unevaluated according to any criterion whatsoever. A major review by Topping (1983) of 21 alternative ways of responding to disruptive behaviour concludes that there is a variety of possible responses, some of which are decidedly unsophisticated and yet probably most valuable. The problem would therefore, seem to be not so much a lack of ideas, but rather an absence of evaluated workable solutions. The LEA off-site special unit is no exception to this general rule.

Upshur (1977) attempted an evaluative study of 19 children in off-site special classes by comparing
their progress with a control group of 24 disruptive children who remained in ordinary classes. The off-site special class programme operated on a psychodynamic and Rogerian basis and the pupils remained in it for 5 months. Upshur found that achievement gains and attendance rates were similar for both groups but that the pupils in the special class programme had worse self images than the controls, according to two self-concept scales. In one particular special class it was found that the children made an average reading gain of 2.4 years in five months, but it has to be noted that the class teacher in this case was described as preoccupied with scholarship.

Another evaluative study is described by Richmond (1978) who comments on a unit based behaviour modification programme for severely disruptive youths aged 14 - 20 years. A token economy was operated, and the curriculum included the study of prevocational and recreational skills as well as academic subjects. A time-out room and unstimulating 'work-room' with strict rules were available. The system was tightly structured and reintegration was achieved by a totting-up system on the token economy and individual contracting. Richmond found that the children showed no change in academic attainment in reading and mathematics although some improvement was discernible in language skills. It is reported that the amount of
inappropriate behaviour declined by 77% over a nine month period but it is not known whether this improvement was carried over in the normal school situation or, if it was, whether it was maintained beyond the short term.

A similar programme was reported by Stein (1976) who relates that in the first year of operation of a special unit, no academic gains were evident, but in the second year, an average of 2 years gain in reading and mathematics and one year's gain in spelling and general information, was recorded. Over a 2 year period, 25% of pupils returned to ordinary schools. We do not know, however, if reintegration continues to prove successful for these pupils in the long run.

An important evaluative study was carried out by Quay and Glavin (1970) who set up a special class for a small group of disruptive boys aged 7 - 10 years, and endeavoured to compare the effectiveness of this with a resource room programme for such children. Pursuing a behaviourally oriented approach with reinforcement and time out, it was found that academic gains were not significant after the first year and so the programme was reorganised to place more stress on academic progress. This proved to be more effective not only in producing academic gains but also in improving behaviour. Quay and Glavin conclude, however, that not only was the special class costly compared with the resource room, but what is more,
referral to the special class resulted in labelling and transfer of responsibility which made reintegration very difficult.

Another study with pupils of approximately this same age group has been undertaken by McNamara and Moore (1978), who report on a unit for primary aged pupils in Britain where mean length of stay was one year and mean Reading Age gain was 2 years. Less than 50% of the pupils were reintegrated into normal school, confirming that although reintegration in the case of pupils of primary school age are expectedly better than those of older pupils, it nevertheless remains disappointingly low.

In a further study which included older pupils, Mickleburgh (1980) has reported on the operation of an off-site unit over a five year period between 1974-79. Pupils in the unit were aged 5 - 14 years and the mean length of stay was 33 weeks. Mickleburgh claims a 50% reintegration success rate on the basis that 46 pupils (out of 68) were returned to ordinary schools and of these 35 were 'not re-referred' to the Psychological Service.

This level of success is, however, not borne out by Becker (1980), whose evaluative study of an off-site unit including largely pupils of secondary age, suggested that reading tests carried out on 8 of 23 pupils demonstrated a mean 19½ month gain over a four month period. Later results on a different set of 8
children showed 8 months mean reading age gain over a four month period, which is closer to the results of other similar studies. Reintegration was again low and only 5 of 23 children returned to ordinary school and of these the reintegration was subsequently to be described as unsuccessful.

When Topping and Quelch (1976) asked Local Education Authorities for information about practices relating to reintegration in particular Local Education Authorities, they found that the criterion indicated for discharging a pupil from a special unit was vague. They found that some authorities stated that a child was discharged as soon as possible or when acceptable for re-entry into ordinary school, but did not set out the basis on which it is decided that a child is acceptable or who decides how soon is possible. Three of the authorities who responded to Topping and Quelch claimed that it was desirable to wean back a child into normal schooling on a part-time basis, with the proportion of time spent in school gradually being increased. One school reported that it was best to place the child back in normal school in the afternoons only, but it was made clear that in such circumstances a close monitoring of the part-time school placement was essential to successful reintegration. A number of authorities made the point that reintegration to normal schooling was sometimes best achieved by the child's transfer to a school other than the original referring school. In another
case, however, it was clear policy for the children to always be returned to the original school. In yet another case, a Local Education Authority indicated that it was much easier to reintegrate a child if he or she could always attend at his or her referring school for some lessons.

Most of the studies mentioned, whilst reporting different levels of achievement for the pupils in question, would appear to have been conducted on the assumption that the pupils will remain temporarily at the unit and are ultimately destined to return to mainstream schooling. Where reintegration is referred to specifically, it seems that reintegration rates are poor. This raises the question of whether the units are failing to aspire to a satisfactory level of achievement or whether the criterion for achievement is misplaced.

Misplaced or not, Topping and Quelch (1976) stress that there was widespread agreement in the response by local education authorities to their enquiry on one particular aim of the special classes or units and this was mentioned by over half of the responding authorities.

This aim was to return the child to an ordinary school situation. Beyond this there was very little agreement about the aims of the units and as Topping and Quelch put it, if local authorities really saw return to ordinary school as the main aim of special
units, this seemed something of a logical negation of the reasons for the units existence. Even so, the present study confirms the point and all local authorities who provided information in this context on special units made reference to the ultimate return of the pupil to a mainstream school.

An impressive amount of data on off-site units for disruptive pupils has been produced by the Inner London Education Authority although it is questionable whether much of this material has really come to grips with the commonly accepted central evaluative questions such as 'do the units improve behaviour and academic attainments and maintain this improvement?'

Two particular reports are, however, of interest. The first of these, (ILEA, Report RS 744/80, 1980) was intended to be largely descriptive and did not cover all existing units and programmes run by the Inner London Education Authority. The centres covered were asked about curriculum content. Of the 88% of centres that responded, all offered English and all but one offered Mathematics. A relatively higher proportion and certainly higher than indicated by the DES (1978) and Dawson (1980), offered History and Art, but provision for Games was less good. Attendance rates were poor compared with those of other studies of off-site centres, with mean rates running at approximately 65%. Reintegration rates for these units were about 25%.

The second report (ILEA, RS 788/81, 1981d) is
interesting because it refers to questions of organisation and management of the centres as well as curriculum content and reintegration rates. Most significantly, however, a survey was also undertaken of the ordinary school's perception of the centres. Forty per cent of the ordinary schools were very positive towards the centres. The remaining schools made various criticisms, of which the chief was that in some cases the centre had had zero or transitory effects on the pupils who had attended.

It is here that we come to the crux of the matter because a major problem in the evaluation of provision for disruptive pupils is that a large number stops being disruptive after a while quite irrespective of what has been done to or for them. In short, the problem behaviour shows what Topping (1983) calls spontaneous remission. The point is supported by a considerable amount of research evidence (e.g. Levitt 1957, 1963; Eysenck 1960; Lewis 1965; McCafferty and Cummings 1967; Rachman 1971; Shepherd 1966, 1971; Glavin 1968; Clarizio 1968; Onondago School Boards 1964).

Glavin (1972) presents data which is fairly typical and shows that in only 30% of cases of the large group of disruptive children he studied did the behaviour problem persist on follow-up four years later, quite irrespective of any intervention. A persistence rate of around one-third and a remission rate of about
two-thirds occurs with notable regularity throughout the relevant research literature. It would seem to follow that any intervention purporting to ameliorate the disruptiveness of school pupils needs to show a success rate of over 66% in order that the evaluator can feel that some sort of significance has been established. In seeking to achieve just such a success rate, a number of key issues come immediately to mind. Firstly, the widely accepted belief that the most effective way of preventing serious problems of disruption is by early identification and prevention, would appear to be questionable. Secondly, the approach to disruptiveness by seeing the cause in terms of within-child 'disease' makes little real sense.

It can, of course, be legitimately maintained that the stress and disruption on teachers, pupils and school systems that would be caused by merely waiting for the problem pupil to 'spontaneously remit' is so intolerable that action must be taken. If that is the case, however, then we must be clear in our reasoning for it is one thing to place a child in a special unit with the express purpose of bringing about long-term behaviour modification and quite another to do so with the objective of allowing the normal course of schooling to run more smoothly.

As Topping (1977) says, therefore, the two objectives may well be quite divergent and no attempt to call a
dustbin a recycling system is going to fool any evaluator. Clearly, then, a prerequisite for effective evaluation is clear, concise and honest assessment of the objectives.

This is, of course, an issue of some significance and it is noteworthy that the limited evaluation of LEA off-site units which has taken place has in many cases been undertaken by the head of the unit (Lawrence, Steed and Young, (1984a). In such circumstance, the evaluation could often be said to be open to bias, as the head's post depends on the continuation of the unit.

There are, however, examples of independent research projects and they may be pursued further. At least one of these seriously questions the conclusions outlined above. For example, the 'spontaneous remission' concept stressed by Topping and others would seem to be inconsistent with the views advanced by Baker, Hughes, Street and Sweetham (1983). Baker et al. show that children from a cohort of consecutive births identified with behaviour problems by the Richman Screening Questionnaire at age 5, continued to have behavioural problems, as assessed by the Rutter parental questionnaire and the Bristol Social Adjustment Guide more frequently at the age of 8½ - 9 years than matched control children. No difference between the groups in non verbal IQ was identified by the Pidgeon Non-Verbal Test BD (1970).
Again, Neale (1958) showed delays of 5 months for both accuracy and comprehension for a study group compared with a group of controls. These results confirm the findings of Richman and others (1982) in a different setting.

Richman et al. have reported the results of a follow-up of a sub-sample of a representative sample of 705 children aged 4 years in an outer London Borough. At age 3 years, children with behaviour problems were matched for sex and social class with the next normal child on the lists and both groups of children were seen again at 4 and 8 years of age. At age 8, 62% of children in the behaviour problem group and 22% in the control groups had behaviour problems according to an overall clinical assessment.

If, therefore, spontaneous remission does apply, then it does not apply before age 8 - 9 years according to these two studies. Behaviour problems in young children appear to persist and may be associated with some educational disadvantage as measured by reading ability in 8½ - 9 year old children.

This presupposes, however, that no 'remedial' action is taken. Remedial attention would presumably be applied if the pupil in question was referred to an off-site special unit.

Coulby and Harper (1981) raise the question of whether outcome from a period spent by a pupil in a special
unit varies according to age or sex. They found that BSAG scores showed greater change in respect of pupils of under seven years of age compared with pupils of over fourteen years of age. An analysis of variance between the age groups in Coulby and Harper's study showed that the figures were significantly different at the 0.05 level. No significant differences in scores were, however, found between sexes. Again, neither the particular teacher involved nor the length of stay in the unit were found to be of significance.

Even so, if the starting point in order to describe a special off-site unit for disruptive pupils is successful, is that it must display a success rate, whatever we mean by that term, which is at least as good as the rate of spontaneous remission, then the studies cited offer little positive encouragement.

Lewis (1965) carried out a review of research studies aimed at determining the long-term effects of school related 'treatment' and concluded that there was little difference in adulthood between children who applied for treatment and got it and those who applied for, but did not get treatment. Again, Fischer (1978) has reviewed the results of effectiveness research in five areas of professional practice, i.e. social work, psychotherapy and counselling, the penal system, psychiatric hospitalisation and education. His conclusion is damning. He states that in all these areas his research indicates that, at best,
professionals are operating with little or no empirical evidence validating their efforts, since lack of effectiveness was the rule rather than the exception. In addition, a pattern of deterioration was found in which clients of professionals frequently were found to be less well improved than people with similar problems who received no professional services whatsoever.

Our attention is drawn to a specific case in point by Graf (1979) who outlines an evaluative study of 272 special education programmes for socially and emotionally disturbed pupils in U.S.A. Schools. They found that only 103 had any data on academic or behavioural gains which might have indicated programme effectiveness and of these, only 11 had sufficiently clear data to make the results replicable.

A similar view is illustrated by U.K. studies. Dawson (1980) for example, surveyed a sample of special schools, units and classes for disruptive pupils which had been selected by LEAs as examples of best practice. Dawson questioned the sample about the considered success of the unit or class according to whatever criterion the unit or class wished. Almost half of those surveyed offered no criterion at all. Of the remainder, some chose entering employment as a criterion, at a time when the odds were very much in their favour. Others chose return to ordinary school as a criterion. The lack of logic in this has already
been alluded to. Dawson found that 62% of his sample met one or more of the following criteria:—

(a) transfer to ordinary school, whether or not successful;
(b) left school at normal leaving age and entered employment, whether or not successful;
(c) left to attend College or increase examination passes, whether or not successful.

Further analysis of Dawson's figures shows that 56% of pupils left the special unit or provision before the statutory school leaving age and of these 57% transferred to ordinary school. Hence only 32% were reintegrated. Considering that the composition of the sample included not only the more aggressive and disruptive secondary school pupil but also withdrawn and socially incompetent children, for whom the prognosis is known to be better (Topping 1976) then the reintegration in question is hardly notably high.

Dawson (1980) is led to conclude that at least if success is defined in terms of containment of pupils, the special units are understandably successful. Even here, however, it is doubtful if satisfactory evaluative criteria are met since as Dawson accepts, of the 1346 children catered for in the surveyed 'best practice' provision during the 2 year period who left before school leaving age, 113 (i.e. 8½%) were excluded by virtue of being expelled.

Again, Lane (1983b) reports a three-year follow-up of
114 pupils recorded as experiencing a range of problems, some of whom received no outside help, while the other group encountered intervention including off-site units. While the 'treated' group did show slightly better outcomes at follow-up, these differences did not reach statistical significance.

It is probably the case that one of the problems in establishing evaluative criteria is determining the relative emphasis to be placed on improved behaviour and improved attainment. Macmillan and Morrison (1979) have suggested that a reduction in disruptive behaviour tends to be the primary objective for special units, possibly at the expense of attainment. This is an interesting point and although writing in a slightly different context, Rutter et al. (1979) raise a parallel in ordinary schools where they found that in a sample of London Secondary Schools, the more emphasis there was on pastoral care, the worse was academic attainment.

Rutter et al. (1979) further make the point that teachers who taught the whole class rather than individuals, who concentrated on the lesson topic, who sometimes made the class work silently and who started and finished lessons on time, produced the result of better behaviour from their pupils than teachers who did not. Similarly Ayllon and Roberts (1974) indicated that direct reinforcement of academic behaviour tended to result in the reduction of
problematic behaviour, even though the matter of reducing disruptive behaviour did not necessarily result in academic gains. It would seem that children are inclined to make better progress, both behaviourally and academically, in schools which emphasise academic matters.

In the light of these findings, it is disconcerting to note that the curriculum is generally limited in most special units. The DES findings in this respect are elsewhere alluded to and they are confirmed by Dawson (1980). Dawson went further to enquire into the management strategies used for disruptive pupils within the special provisions and found that the most frequently cited were: firm, consistent discipline; improvement of self-image through success, individual counselling and discussion; warm, caring attitudes in adult/child relationships; systematic use of incentives/deterrents. This is an interesting list if for no other reason than that it sounds little different from what most ordinary schools would say about themselves, which raises the question of the actual specialness of special provision.

Dawson (1980) goes on to report a very marked move away from individual psychotherapy, drug therapy, opportunities for regression, creative art work and group therapy, all of which were techniques much favoured by pioneers of residential schools for the maladjusted.
Topping (1983) concludes on the basis of this that schools would do better to concentrate on education rather than therapy.

As Quay (1973) has put it, direct teaching is the technique most capable of evaluation - it should be tried first and only discarded if ineffective. This may be a very significant point, since the Inner London Education Authority School Support Centre Report, (ILEA, 1982) has indicated that academic progress is rated by pupils as an important benefit obtained from attendance at an off-site special unit. Indeed 51% of the pupils questioned, mentioned academic benefits such as 'you learn more', 'better education', 'get more help with work', 'catch up on reading and spelling' and 'learn to do the work properly'.

The School Support Centre report includes considerable detail of pupils' opinions on centres. When asked to comment on the differences between parent schools and centres, pupils' responses showed marked support for the centres. A number of aspects of the centres were liked, including academic work as indicated above, whilst few features of the centres were disliked. In fact, 59% of pupils said that nothing within the framework of the centre was disliked. Interestingly, one particular benefit noted by pupils was progress made towards reintegration into the mainstream school. Whilst there is lack of agreement in the literature on
evaluation studies in respect of a number of points, several important questions are raised.

Many of the evaluation studies cited commence from the assumption that rates of reintegration into mainstream school represent a reasonable criteria by which units may be assessed. If this is a correct assumption, then the evidence is damming since there is little to suggest that successful reintegration is other than minimal.

It is possible, however, that the assumption is incorrect. Several points arise from the literature reviewed in this section to give substance to an alternative view. This states that there is little mileage in seeking successful outcomes from a 'deviancy model' which aims to treat and remodel disruptive pupils with the intention of returning them reformed to their previous schools. Rather, the explanation for the pupils' initial disruptive behaviour, may not be wholly 'within child' and other causative factors might be sought. Criteria for evaluating the success of units would then differ accordingly.

It is worth summarising the relevant issues arising from the literature reviewed and which give rise to this suggestion.

Poor rates of reintegration are commented on by a number of authors. This may be expected if it is
assumed that at least a portion of the pupil's problems reside not so much within himself or herself as within the school to which he or she is returned. The view would seem to be supported by those studies which confirm that pupils like being at off-site units. Such expressions of support are not consistent with the deviancy model normally used to explain, albeit by inference, the role of the off-site special unit. They are more consistent with the idea of pupils gaining respite in the haven of the unit. Neither does the fact that that pupils frequently express the desire to return to mainstream schooling necessarily run counter to the view.

Again, references to spontaneous remission in the literature reviewed, may also be most significant. From the studies cited we are left unclear about all of the scholastic circumstances surrounding the progress of the pupils who spontaneously remit. It may well be that over the periods referred to by the studies in question, specific aspects of these pupils' school experiences change notably, to include for example, being taught by different teachers. It may just be, therefore, that the change in behaviour is not, after all, spontaneous but rather the result of a direct, if subtle, response to a marginally different school environment.

Some support for this view is provided by a number of studies which suggest that sound teaching is as likely
to improve disruptive behaviour as is a direct approach to behaviour modification. It is, therefore, possible that the reverse is also the case, i.e. that inadequate or non-relevant teaching gives rise to disruptive behaviour.

In conclusion it may be claimed that on the face of it, the available literature on evaluative studies of off-site special provision, gives little support to the notion of successful units. Further analysis suggests, however, that the criteria employed for evaluating the units may be unsatisfactory in several respects; most notably in that the explanation of disruptive behaviour may not be as 'pupil-centred' as supposed.

This must clearly be pursued further and it is necessary to search additional literature for evidence to support or oppose the contentions outlined above.

Such evidence will be pursued in the first instance by considering the units themselves, in some detail, before proceeding to analyse the circumstances that cause some pupils to be deemed disruptive and be referred to off-site special units.
6. The Nature of Off-Site Special Units

In the light of the conclusions drawn from preceding sections of the literature review, it may be expected that the nature of off-site units will reflect a particular philosophical stance. It is, however, difficult to find evidence of a clear philosophical stance, even one which may be open to question. The point is pursued in the literature and it is confirmed that despite the literature which should cause us to look more carefully at the reasons underpinning disruptive behaviour, off-site special units tend to be viewed as a confused mixture of punishment system, remedial system and containment facility.

Units go by many different names including Sin Bin, Tutorial Unit, Exclusion Unit, Sanctuary, Adjustment Unit, Assessment Unit, Withdrawal Unit, Support Unit, Educational Guidance Centre, Day Unit, Off-Site Support Centre, Retreat Centre, Haven, Opportunity Group and other names.

Bird, et al. (1980) have suggested that the bandwagon growth of units for disruptive pupils is responsible for some of these extraordinary and absurd provisions, from which pupils rarely returned to ordinary schools.

It is by no means clear, however, that the name significantly reflects the ethos underpinning the unit and neither does it give more than a hint of the nature of the unit (ACE, 1980).
Whilst there is considerable variation between units, there are also certain factors which many units have in common. The nature and extent of these factors are pursued in this section as a necessary pre-requisite to understanding the causes of disruptive behaviour and to developing a criterion by which special units may be evaluated.

The Advisory Centre for Education found that in 89% of the units, students remained on the register of the feeder schools. This is notable in the light of what has been said previously and it would be interesting to know precisely what arrangements were made in respect of the remaining 11% of units to cause students to be removed from the roll of the normal school. Topping (1983) suggests that pupils presumably remained on the register of the feeder school in order to facilitate reintegration. In practice, reintegration rates are so low that the effect of this measure is largely to remove any requirement of official recognition of, or accountability for, what actually represents a significant change in a pupil's circumstances.

Littler (1982a) suggests that the justification for removing a pupil to a special unit is generally that it is only temporary and that the pupil remains on the normal school roll for this reason. Indeed, the particular off-site units involved in Littler's study
stressed that in order that a pupil who had been suspended by the feeder school be accepted by the unit, it would be necessary for the suspension to be lifted and for the pupils name to be reinstated on the school register. This practice seems to reiterate the concept that the legitimacy of special units will be undermined if they begin to be seen as alternatives to school.

The assumption clearly is that special units are in the business of reintegrating pupils into the mainstream of education. The underpinning theory would seem to be that a high teacher-pupil ratio, coupled with the special expertise of the unit staff, will enable a pupil who has had a stormy school career to see what has gone wrong and to recognise what adjustment needs to be made in order to survive in school.

This is a clear reiteration of the general acceptance amongst school and education department staff that disruptive behaviour is pupil generated and that behaviour modification is necessary if the pupil is to cope in the mainstream system.

An Inner London Education Authority Advisory Head (Seidel, 1982) has suggested that off-site centres seem to be conceived in one of two ways, either as places to which pupils can be sent for a comparatively short period to be rehabilitated and then reintegrated into school, meanwhile giving the school, teachers and
peer group a breathing space, or a place to which pupils can be sent when every other avenue has been tried and failed, and the pupil in question is not benefitting from the education on offer, nor allowing others to do so. Either way, the belief would seem to be maintained that the causes of the problem may be found within the pupil.

The Inner London Education Authority (ILEA, 8205, 1978) have stated that the education objectives of off-site units are:

(i) To find educationally acceptable ways of dealing with pupils who disrupt their education and that of others;
(ii) To reduce the need for corporal punishment;
(iii) To reduce the numbers of suspended pupils.

And the organisation objectives are:-

(i) To sustain continuity between school and unit;
(ii) That all Secondary Schools have access to a place for pupils who cannot stay in the normal classroom.

The concept of the off-site special unit as a school support system comes through but yet again the underlying assumption is that the local authority's response to disruptive behaviour needs to be approached via the correction of the pupils behaviour prior to their subsequent return to normal school.

This broad standpoint was reiterated in a subsequent
ILEA report (ILEA, 9214, 1979), as well as in a number of other reports, the most recent in 1987 (ILEA, S7035, 1987).

In practice, the majority of units are dealing with fourth and fifth year pupils and most attempts at reintegrating these older pupils are doomed to fail. Many pupils of this age, and their parents, must feel that they have arrived at the end of the road and that the real 'raison d'être' of the unit is an alternative to suspension. (Francis, 1980b).

Lawrence, Steed and Young (1986) express the view that this implies a penal model.

This is a point of some significance and may well serve to explain the continuation of off-site units despite the ambiguity and confusion that surrounds them. It is, therefore, worth pursuing further.

Lane (1983b) has shown that children presenting conduct disorders in school show a high subsequent rate of delinquency at five-year follow-up. He implies that effective intervention in this chain of events, can be of substantial benefit to society, irrespective of any short-term benefit to the pupil or to the initial school.

Schaber and Hausman (1982) explored the relationship between pupil disruptive behaviour in school and juvenile delinquency using a self-report questionnaire administered to 2032 pupils in the Provence of
Luxembourg. Although they admit that they have simply established relationships which only longitudinal studies can translate into cause and effect, they make out a strong case for regarding delinquency and disruptive behaviour in schools not just as related, but as the same process.

In reply to the question, 'Is it necessary to distinguish behaviour in school from delinquency?' they respond by stating,

There is no room for distinguishing these two types of behaviour and fundamentally they belong to one and the same universe. This means that it is now possible to fuse these two types of behaviour, both in respect of definition and measurement. (p. 66).

On delinquency reduction they say,

... misbehaviour in school could also have repercussions upon the level of involvement in delinquency. (p. 94).

Even allowing for the fact that the above statement is an over simplification of the relationship, it remains of interest that Schaber and Hausman strongly restate the early findings of West and his colleagues (1969, 1973, 1977) that the most significant single factor predictive of later delinquency is disruptiveness at school at age 8 years.

This alone could be sufficient to account for the continued existence of off-site special units. So long as they constitute some form of sanction then a penological flavour is naturally discernible.
It would appear that offering a quasi-penological alternative form of treatment for pupils who are difficult and disruptive in school would fit in well with Barbara Wootton's (1978) suggestion that all delinquency should be dealt with within an educational umbrella covering parents and school staffs. Units for disruptive pupils could, therefore, be seen as a bridge structure between education and penology and as such are open to use, and to abuse, by both systems (Lawrence, Steed and Young, 1984b).

In these circumstances, however, it is difficult to see the off-site special unit as merely a support system or extension of the school.

Rather, it is nearer to being a 'parallel school' and the management structure should reflect this.

However, the survey of the Advisory Centre for Education (ACE, 1980) found that few units had managing bodies and of those that did none reported parent representation. Although a number of Local Education Authorities referred to consultation with parents, it is noteworthy that nowhere was there any suggestion that parents or students have the option of refusing referral to a unit.

In fact, this point is subject to change in the case of the Inner London Education Authority where in January 1985 the schools' sub-committee received a report from a working party on off-site units for
disruptive pupils. The report argued that the placement of pupils in an off-site centre should be mutually agreed with parents who must always have the right to refuse such placement and to discuss alternative strategies. At the sub-committee meeting in March 1985, a paper commenting on the working party's recommendation noted that the particular recommendation would be a significant shift from the arrangements originally agreed with headteachers who were concerned that they should be able to place pupils rapidly in provision which, although it was in some cases shared with other secondary schools, was part of the school (ACE, 1985). The point was reiterated in 1987 (ILEA, S7035, 1987) and preparations made for its early implementation.

Even so, there is undoubtedly a diversity of background, appearance and behaviour that highlights the difficulties associated with the classification of the behaviour of disruptive pupils and hence similarly ascertainment for placement in a special unit.

These children do not have unidimensional problems (Tattum, 1982). It is the case, however, that when special placement is made, categorisation is based on a specific dimension of behaviour, which can mean that in many cases the nature of the provision is inappropriate. Some children may well have serious behaviour disorders and teachers in special units are not necessarily trained to cope with children who are
maladjusted and suffer from serious personality and learning problems. Thus attention is focused on disruptive behaviour by the ascertainment and placement process and the mind is in consequence concentrated on one facet of the child's behaviour without looking beyond to try to locate the cause of the child's problems.

Tattum (1982) puts it in the following words,

> With many children it places the staff in units in impossible positions, for they are ill-equipped to diagnose and help children with deep-rooted problems and during the short time that many have to work with the pupil the impact is superficial and the change merely on the surface. This is not to criticise the staff, but rather draw attention to the problems they face because of the lack of forethought so essential in the setting up of places of this kind. Too many are ill-conceived, they are mere stop-gap measures and whilst they may alleviate the problem in one area, they are by their nature creating new problems of ascertainment and selection, assessment and treatment and ultimately the reintroduction of the pupils back into mainstream school, only nominally better equipped to cope with the challenging situation which brought about their initial categorisation as disruptive. (p. 47).

Her Majesty's Inspectors (DES, 1978) visited 108 units and reported many to be badly housed with staff having to beg and borrow essential equipment from local schools. This early lack of adequate facilities and resources was confirmed by Ghodsian and Calman (1977).

The problem for off-site units is, however, more
fundamental than mere inadequacy in resources.

Facilities developed as part of special schooling have an ethos which is clearly defined in relation to educational handicap. Although the Warnock Report (1978) briefly makes reference to disruptive pupils as a group of pupils with special needs, the ethos of off-site units for these pupils is more problematic (Lawrence, Steed and Young, 1984a). This no doubt arises from the notion that the units cater for pupils with whom mainstream schools have been unable to cope.

Most local education authorities would, of course, not wish to describe the off-site units as 'dumping grounds' for pupils whose behaviour is unacceptable within the normal school system. (Seidel, 1982). Indeed, in referring pupils to off-site units it is frequently stated by the parties concerned that such a referral would be in the best interests of the pupil.

There thus arises an intriguing dichotomy between the use of off-site units for the best interests of the individual concerned or the best interests of the referring schools.

This is, of course, apart from the penological flavour previously alluded to.

Meanwhile, the anomalous and perhaps potentially dangerous nature of the off-site units as a structure
within the education system in England and Wales has not reduced the numbers of the pupils referred to them.

The anomalies are, for the most part, carried through by caring, experienced, responsible teachers, psychologists, doctors and administrators, all acting in good faith, in what they genuinely believe to be the best interests of the children concerned.

As the numbers of pupils referred to special units continue to rise, it is becoming evident that this form of provision has not had the benign influence on behaviour in schools which many had hoped for. It has not, for example, reduced the use of the sanction of suspension even where units have been set up with this specific intention (Lloyd-Smith, et al. 1985). The issue is reiterated by Mongon (1987) who argues that the 'displacement model' which has historically prevailed in schools' responses to troublesome children, has failed to show a satisfactory effectiveness either in terms of outcome for identified pupils or in terms of relieving pressure on teachers.

It is thus difficult to understand why the process of referring pupils to off-site special units, should in these circumstances continue.

The most obvious, but perhaps most simplistic explanation lies in terms of a conspiracy within the
education system to maintain the status quo (Galloway and Goodwin, 1987).

As with previous sections of the literature review, this section again shows that the assumption upon which pupils are referred to the Units is that they will receive remedial attention and will hopefully be reintegrated eventually into mainstream schooling. The desire to retain pupils on the school role of the referring school reiterates the fundamental belief that the pupils referred to special units will return to their schools of origin. Indeed, the concept of remedial treatment and ultimate return appears sufficiently entrenched in the literature reviewed above as to confirm a penological flavour. In such terms, the off-site special unit takes on the perspective of part of a local authority's punishment system, as opposed to a remedial system, per se.

Punishment system or remedial system, dumping ground or school support system, in any event the concept is underpinned by an acceptance that the fault lies within the pupil and correction is, therefore, necessary.

There is little evidence to suggest that this is questioned. Indeed, as Galloway and Goodwin (1987) suggest, we may well be witnessing a conspiracy within the education system to maintain the status quo. This is not too surprising since much of the
literature comes from sources which would not wish to readily accept that the units are more successful in coping with difficult pupils than are the schools yet neither would they be expected to agree that the units are unsuccessful, lest difficult pupils are thereby retained in the schools.

In such circumstances, it may be expected that confusion and ambivalence are engendered.

Further light might be shed on this confusion and ambivalence by considering the circumstances in which recourse is made to off-site special units.
7. **Recourse to Off-Site Special Units**

The literature relevant to recourse to off-site special units is reviewed to show that the argument developed in earlier sections of the review is generally supported but further that Local Education Authorities tend to make recourse to off-site units under pressure and for strategic reasons.

It is somewhat surprising that the United Kingdom is alone amongst the countries of Western Europe in responding to the problem of coping with pupil disruptive behaviour by developing off-site special units for disruptive and disaffected pupils (Lawrence, Steed and Young, 1984b). Presumably, this is in the belief that whatever problems the pupils may themselves have, together with whatever benefits may accrue to the schools, can best be countered in an off-site special unit.

Information specifically illuminating the point is difficult to come by and is hard to interpret.

The situation is probably summed up succinctly by Kauffman (1986) when he likens the stage of development in special education for pupils with behaviour disorders to that of adolescence. Both adolescence on the one hand and the response of local education authorities to the problems of disruptive behaviour on the other, display the common adolescent characteristics of over-estimation of abilities and inadequate recognition of needs as well as a certain
lack of tolerance for ambiguity and uncertain identity.

The present writer's enquiry to local education authorities concerning off-site provision and conducted in connection with this study, may be drawn upon to illustrate the problems associated with recourse to off-site units since it has shown that the establishment of an off-site unit may bear little relationship to the educational considerations discussed in the review of literature so far. The comments of one particular local education authority were not untypical. Placement in a special school was deemed difficult to arrange without a long delay and may not have been appropriate. In these circumstances, a suspension may become permanent so that unless the local education authority offers home tuition, the local education authority may be shown to be in contravention of its legal requirements to educate. The establishment of an off-site unit thus extricated the authority from its dilemma. The authority was able to meet its statutory obligation and also justifiably claim to be meeting the special educational needs of disaffected pupils from schools within the authority.

Many local education authorities responding to the enquiries of the present writer pointed out that disruptive pupils make excessive demands upon the resources of the mainstream school and disrupt the
work of other pupils. To this extent, the off-site special unit provides a reasonable response to the problem. Furthermore, the existence of the off-site special unit provides the local education authority with one additional type of resource. There is a widespread feeling amongst local education authorities that disruptive behaviour is a multi-faceted problem and therefore, requires a diversified approach with the off-site unit being an important extra facility.

Macbeth (1977) gives a different slant to the same point by suggesting that special units are in some ways the descendants of the free schools of an earlier era and to this extent their child-centred philosophy represents not an alternative to mainstream schooling but a supplement.

In the light of what has been said, it is perhaps not surprising that the response of local education authorities to disruptive behaviour is diverse, but the thread which seems to run persistently through reports and working papers is concern about the level of suspensions from schools, related closely to the statutory requirements on authorities to provide full-time education for all and to respond to the pressure from teachers' unions to make special provision for children whose behaviour disrupts the education of the majority and interferes with the normal running of the school.

Many local education authorities responding to the
present study indicated that they have explored the potential within the school to make an appropriate response to disruptive behaviour without invoking additional costly provision. Schools had been urged to review the relevance of curricular and organisational arrangements. Improved home-school links had been advocated as also had the provision within the school of adjustment classes, sanctuaries and remedial classes. The school staff had been urged to avail itself of relevant in-service training. At least one authority interviewed by the present writer had organised a close working relationship with other agencies, such as social services, to mount a joint response to the problem, involving the establishment of a group of peripatetic 'trouble shooters', with the further availability of home tutors.

Yet, having explored all the possibilities within the system to respond to the problems arising from disruptive pupils in the schools, many local education authorities seem to accept, albeit in some cases reluctantly, the need for additional provision in the form of the off-site special unit.

Rightly or wrongly, local education authorities are pressured not only by dissatisfied parents and emotive press reports, but also by recognised academics who suggest that the extent of disruptive behaviour in some schools is very serious. Steed, Lawrence and Young (1986) who monitored disruptive incidents in two
schools over two separate single week periods found the number and seriousness of the incidents observed to be well in excess of those reported through official channels. They report that 144 disruptive incidents occurred in one school in one week.

Reid (1986) describes the existing levels of quantifiable and unquantifiable pupil disaffection within many schools today as nothing short of a national disgrace.

Holman and Coghill (1987) talk of the financial and social cost of not properly attending to the problem of disruptive pupils as too high for society to ignore.

In such circumstances, local education authorities are clearly anxious to do something and if the establishment of off-site special units for disruptive pupils can be demonstrated as a positive course of action, then it is likely to be pursued.

Thus the off-site special unit is most generally seen as being beneficial as a place of last resort, reluctantly developed by local education authorities as a long stop and as a recognisably different place of learning for those pupils for whom the normal sanctions have failed.

There is the further argument that within the off-site unit there is an enhanced opportunity to recognise those situations in which pupils are likely to be
disruptive, and act quickly in a preventive way to stop possible contamination of others in the group (Bolger, 1975). It is not clear, however, what value this serves, other than in a research sense where information may be fed back to mainstream schools. There is little evidence to suggest that such learning experiences are fed back to schools on any extensive basis.

More significantly, perhaps, is the extent to which schools are pressurised by parents and governing bodies to rid the establishment of its disruptive elements in so far as this is necessary if the good reputation of the school is to be maintained.

Such pressures are, of course, increased by the much favoured emphasis upon school effectiveness and it is notable that the fact of schools being required to publish information about examination results, places the school under stress to maintain behavioural and other standards.

Thus, in order to maintain a reputation for good academic standards, schools must 'sift out' those pupils who display a need for special help and attention. Yet a fundamental problem arises from this situation.

Special educational needs are identified by teachers with little or no consultation with the individual pupils concerned, even though formal assessment under
the 1981 Education Act requires teachers to comment on the child's own perception of his or her needs. In practice, no more than lip service tends to be paid to this requirement and attempts to include children's perceptions of their own needs are frequently left entirely to the teacher or other professionals involved (Galloway and Goodwin, 1987).

The problem goes still deeper than this implies. It follows that it is not logical to say that a pupil has 'needs' without saying that he or she, or the teacher acting on the pupil's behalf, also has 'wants'.

Thus when teachers speak of pupils having special educational needs they are necessarily referring, often in very general terms, to something they want to be provided for the child.

To complicate matters further, a teacher's statement that a child has special needs is often based on the view that the child's presence in class is having a detrimental effect on other children in the class. In other words, the individual child's progress or behaviour may not be the sole criteria for action but rather a 'post hoc' rationalisation of the teacher's concern for the progress of other children.

In such conditions, it is easy to appreciate that in determining that a pupil should be recommended for removal from mainstream schooling to an off-site special unit, the teacher is less concerned to ask if
the pupil is responding to a display of frustration resulting from poor reading skills, or other attainment failure, and more inclined to maintain the smooth organisational structure necessary for the majority to undergo instruction, by removing the offending pupil (Tattum 1986).

This is an important point if for no other reason than it reminds us that whatever the educational debate about the role and function of special off-site units, we must not lose sight of the fact that many decisions within the educational system are made for strategical reasons.

Previous literature reviewed has returned repeatedly to the notion that off-site special units are in business to provide difficult pupils with remedial attention. The literature commented on in this section, whilst not disputing the point, maintains that the first priority for the off-site unit is to support the school system. If, therefore, the off-site unit is an important extra educational resource within the armoury of local education authorities, the criteria for evaluating this would seem to lie in the extent to which it assists the mainstream school system to function satisfactorily.

It would be worthwhile considering the relevant literature which refers to the processes by which pupils are referred to special units and the difficulties which surround their return to mainstream
schooling, to see if this assists in the further clarification of the point. After all, if the purpose of the unit is seen primarily as one of providing a support for the school system, then it is not clear just what the unit is expected to achieve in respect of the pupils referred to it, when the ultimate goal, is to return pupils to the school of origin. The point will be pursued through the literature.
8. **Referral to Units and Reintegration into School**

Literature pertinent to the questions of referral and reintegration is reviewed to show that whilst these figure prominently as important central issues in a consideration of off-site special units, they lack precision as usefully descriptive terms. In any case, the notion of reintegration may be a 'red-herring' when used as a means of evaluating units. Successful reintegration, as an evaluation tool, is only meaningful so long as disruptive behaviour is seen as the fault of the child. The fundamental question raised is, therefore, are reintegration rates poor because units fail to bring about long term change within the child, or does the initial fault lie elsewhere?

A critical point cited in opposition to off-site units relates to the difficulties which arise when attempts are made to transfer pupils back to their own school.

Topping (1983) refers to information from both the North East of England as well as the South East indicating that although the goal of disruptive units was supposed to be reintegration, a negligible number of children had actually been reintegrated. Again, Galloway (1979) commented that one consistent trend from the available literature is that successful return to school is seldom achieved. The point is confirmed by McLaughlin (1981) and serves to reiterate the same issues, which were raised in a previous
section of the literature review.

The DES (1978) survey explained this tendency by indicating that procedures for returning pupils to school were often less well developed than those for referral to units. There were differences between units and schools about acceptable patterns of work and behaviour, whilst again schools were often unwilling to take back particular pupils. Also parents could be reluctant to support the return of their children to schools where failure had already been encountered. Transfer to other schools from the units had the problem of requiring new relationships to be established by the pupil and the risk of overloading some schools with a high proportion of difficult pupils has to be recognised.

Galloway and Goodwin (1987) have put it this way, "In view of the ambiguous and often unstated motives in referring pupils to off-site units, it is perhaps less than surprising that their record in returning pupils to ordinary schools should be extremely poor." (p. 58).

The same is reported to be true of all off-site units established by the Education Department in New Zealand, (Galloway and Barrett, 1984).

The Inner London Education Authority lay down guidelines for referral to special units for disruptive pupils, but it is clear that these
guidelines are open to varied translation. It has in the past been usual for referral to be by brief from the head of the mainstream school to the teacher in charge of the unit. In secondary schools this is often delegated to pastoral heads and it may be expected that the criteria for admission become blurred in the process (Coulby, 1983).

The ILEA Report 6210 (1986) has more recently devised a single referral form, despite the reservations of some teachers. This allows for full participation of parents and pupils in the referral process and requires parental consent for referral to an off-site unit. It also permits the co-ordination of all referrals divisionally.

One particular Special Unit cited by Coulby (1983), lays down a working definition of that which constitutes a pupil appropriate for admission, i.e. a child who by his/her behaviour is interfering with his/her own education or that of other children, or is making the teacher's task inordinately difficult.

It is noteworthy that the 'prospectus' for the special unit referred to above (ILEA, 1983b) states its aim to be, "To assist schools with the education of disruptive pupils." (p. 2).

This is an interesting point and supports the point raised earlier that the purpose of the unit is to serve as a place to which pupils may be referred for
the benefit of the referring school and its pupils rather than for the benefit of the pupil referred.

Ling (1987) cites the head of a unit for disruptive pupils who sees himself and the unit not as child-centred but as school-centred. As the head puts it, "Only after we have helped the schools are we child-centred. If we can do things for the kids, then that's fine, a bonus, but otherwise we are trying to help the system, to respond to what it wants of us." (p. 74).

This differs markedly from the position relating to the Hackney School Supports Centre (1983) where referral is to a management committee and where potential clients are described as being nearer to cumulative offenders whose gain from the comprehensive school has become less than the loss arising from their capacity to make trouble.

In summary of the point, Ford, et al. (1982) have shown that the whole question of referral can be haphazard. On the other hand, the Inner London Education Authority Advisors (Seidel, 1983) emphasise that each school within the authority has to devise a referral procedure suitable to its own needs and organisation. It is made clear that referral procedures must demonstrate support for both pupil and school and that, "Great care needs to be taken not to present the referral out as a punitive act, but rather one whose major aim is to help pupils to function
normally again after a period at a unit." (p. 2).

The problem is, of course, that the very idea that the pupil may function normally again after a period at a unit, presupposes that the cause of the problem is known and understood and resides within the pupil.

Although, as we have seen, the underlying assumption when pupils are referred to special units is that they will return to school in order to leave school at the age of sixteen years from a local authority secondary school, in practice this happens in only about a third of cases.

Littler (1982a) found that two-thirds of pupils leave directly from the unit, although Mickleborough (1980) claimed a reintegration rate as high as 78 per cent whilst Dain (1977) and Lane (1977) also report high rates of return to normal schooling.

For pupils returning to schools, just as there existed no general criteria for entry, so there is no general criteria for determining that a pupil is 'cured' and ready for return to his or her own school or another school. The appropriate timing is arrived at on an individual basis according to the pupil's readiness. It may be that a pupil expresses a desire to return or that the staff sets the pupil's mind thinking in terms of possible return. Given these beginnings the school can then be approached to discuss the implications of the return and to agree on appropriate timing. In
some instances, it is possible to ease pupils back into school by allowing them to attend school for half of the week whilst attending the unit for the remainder of the time.

When it is clear that the problems of reintegration are large, and especially if the pupil lacks enthusiasm for being reintegrated, the unit takes the view that to refrain from attempting reintegration seems eminently more suitable than sending the pupil back to his or her school merely to live out unhappily the remaining few weeks of aptless schooling (Watts, 1983).

Tracking the history of these pupils back to the feeder schools Littler (1983) found that all Senior High Schools within the appropriate division of the relevant Local Authority referred pupils to the Local Authority unit for disaffected pupils, but not all schools had experience of the return of pupils to the school. Schools agreed that the circumstances under which pupils were referred to and accepted by the unit differed, and to a considerable extent all pupils should be seen as separate and individual cases to be analysed on their own merits. This assumption presumably rested on the belief that problems were of the pupils own making and hence bear an individual mark accordingly. Those schools who did have experience of the return of pupils to the school after they had spent a period of time in the off-site
special unit, were asked to comment on whether they considered that the time spent at the unit was successful in reducing the subsequent incidence of disruptive behaviour. On the whole, schools did feel that some success had been achieved to this end, although some felt that this applied in specific cases only or in the short term only.

A study in the United States of the function of special teachers for disruptive pupils in returning them to mainstream schools, White (1979), shows that the question of reintegration is a complex issue. White indicates that problem areas include establishing a means of determining readiness for reintegration, clearly defining the procedures for reintegration, clarifying different individual's responsibilities, establishing guidelines for the selection of re-entry teachers and classrooms, developing strategies to effect the generalisation of academic and behavioural gains to the ordinary school, and finding a means of providing in-service training and support for specialist teachers as well as ordinary school teachers. White noted that specialist teachers of disruptive children rarely have much time allocated for dealing with reintegration issues.

Confirmation that reintegration objectives are not easily met, comes from studies undertaken in other countries as well as in the United Kingdom.

A report of the District of Columbia Public Schools
(1975), refers to off-site units for children excluded from Junior High Schools. The main objectives of the units, which had a distinct psychotherapeutic flavour, included 70% return to ordinary schools within a year, improved self-concept and improved academic attainment for some. Evaluation to this end was undertaken by rating the level of achievement of the objectives on a scale of high/above average/average, etc. It seems, however, that the reintegration objectives were not met. In fact 33% and not 70% of the children returned to ordinary school in the period under review.

Similarly, Galloway (1987), in a study of six special groups for disruptive pupils confirms that if a measure of success is taken to be the pupils' successful return to ordinary class and a reduced need for subsequent sanctions of exclusion, then the results are discouraging. He found that many pupils experienced considerable educational and social problems on return to the mainstream, and the suspension rate in the first two years of the special groups' existence showed no drop over the next two years.

Galloway argues that the reasons were not hard to see and that, moreover, the problems experienced both by pupils returning to the mainstream and by teachers in the mainstream could have been predicted from a superficial knowledge of social learning theory. The curriculum pupils followed in all but one of the
special groups was not based in any direct way on the curriculum to which they would return in the mainstream class. Both the curriculum and the management techniques in the special group focused almost exclusively on the pupils' behaviour in the special group and were not oriented towards successful learning in ordinary classes. In addition, little was done to equip teachers of ordinary classes with the management and pedagogical skills to teach the pupils more effectively on their return.

This is probably not an untypical situation and successful reintegration in these circumstances, is unlikely.

Bearing in mind that a substantial number of pupils leave school directly from the units, it would, however, be interesting to know if these pupils achieved a satisfactory integration into post-school activity.

There appears to be an almost total lack of information on the progress of pupils leaving off-site units for the world of work. Galloway and Barrett (1984) found only 22 per cent of leavers from four New Zealand units entering employment. The present writer found a much higher rate of entry into employment by pupils involved in the present study. This was probably due in part to the strong curriculum bias to vocational work, compared with that which the pupils would have undergone in the regular school. Even so,
almost all pupils leaving school from the off-site units involved in the pilot-study of the present research, entered paid employment. This is despite a high level of unemployment in the region in question. It is not known if the employment was sustained, but it may be significant that integration into the world of work is successful when reintegration in mainstream schooling is not.

The available literature relating to the referral of pupils to off-site special units and to the reintegration of pupils into mainstream schooling, tends to confirm that referral can be a hit-and-miss affair whilst rates of reintegration tell us little about the success of the unit in meeting pupils' needs.

Since a number of pupils leave school directly from the unit and for others an abrupt change in curriculum and school management style may accompany their return from a unit to mainstream schooling, it would seem that successful reintegration provides inconclusive evidence about the role of off-site special units.

In any case, the literature reviewed is in disagreement in respect of whether good levels of reintegration are or are not achieved.

It would be tempting to pursue through the literature the confusion which clearly exists in respect of the referral and reintegration of disruptive pupils to and
from off-site special units, with a view to making recommendations for refining the system.

This would, however, be to miss the fundamental issue that is at stake.

The ILEA (1983b) indicates that special units are to assist schools with the education of disruptive pupils. This is probably taken further than the ILEA intended by the Head of a unit cited by Ling (1987) who sees the unit as only child-centred once the needs of the referring school have been met. Even so, there does seem to be an inference running through the literature that whilst the explanation of disruptive behaviour may be seen as child-centred the 'raison d'etre' of the off-site special unit is seen as school supportive.

We are, therefore, left to raise the fundamental question of what unit provision is all about. It has been stated previously that it does not make much sense to argue that off-site special units are first and foremost organisations designed to assist the schools by containing those pupils who prove disruptive in mainstream schools and to simultaneously attempt to evaluate the system on the basis of the successful reintegration of pupils into mainstream schools. It makes sense to evaluate units in this way only if it is assumed that the causes of the behaviour displayed by pupils who are referred to the units are pupil-centred and remedial. This conclusion is,
however, questionable.

It would seem, therefore, not particularly helpful to seek ways and means in which referral systems and reintegration rates may or may not be improved, but rather to raise fundamental questions about the causes of disruptive behaviour. This may be helpful in shedding light on what it is that is bringing about the referral of a pupil to a unit and what we should expect in respect of reintegration.

The assumption that disruptive behaviour results from inadequacies of some sort within the pupils, and which gives meaning to the notion of subsequent successful reintegration must clearly be either substantiated or challenged. Ensuing sections of the literature review proceed on this basis.
9. **Schools and Disruptive Behaviour**

The literature reviewed so far indicates that off-site special units for disruptive pupils are founded firmly on a somewhat confused mixture of beliefs that units are needed as depositories for pupils unacceptable to schools, whilst at the same time, pupils referred to them should undergo curative attention in order that they may be returned, suitably improved, to mainstream education. A measure of questioning has run throughout the literature without specifically taking up an opposing stance. The literature reviewed in this section suggests that the school must accept at least some of the responsibility and indeed, it may well be that it is the school that is maladjusted rather than the pupil.

Galloway (1987) is firmly of the view that, "Research on the prevalence of disruptive behaviour suggests clearly that responses must be institutional rather than individual in nature". (p. 33). He goes on to argue that the available literature proceeds beyond demonstrating that the structure of some schools may be conducive to encouraging disruptive behaviour to showing that many of the practices schools adopt fail to recognise the significance of the impact of institutional factors. Thus, as has been pointed out previously, schools continue to function on the assumption that the responsibility for disruptive behaviour must largely if not wholly rest upon the shoulders of the pupil or his/her home background.
This is a significant point and will be assessed further before proceeding to a more detailed review of that literature which considers aspects of the school structure, as well as the rule enforcement system and the curriculum.

It is noteworthy that despite the very considerable volume of literature on the causes and consequences of pupil disruptive behaviour in schools, the school escapes lightly as a causative factor. Indeed, Reid (1986), whilst stressing the need for a multi-disciplinary approach to any explanation of disruptiveness, nevertheless somewhat reluctantly admits that there may be a small number of poor teachers due to government policies of the 1960s when quantity meant more than quality, presumably implying that the vast majority of teachers are sufficiently efficient to escape the proportioning of blame.

Reid goes on to emphasise the point that school assessments of disaffected pupils tend to place the problems firmly on the child rather than on the teachers or the institutions. Consequently most school initiatives are directed towards making deviant pupils conform to the rules and regulations of the institution by promoting good behaviour. The opposite approach, the schools changing and conforming to the needs and demands of their pupils, is rarely tried.

Huxley (1987) introduces the notion of 'mismatch' to focus attention on the possibility that the
expectations of teachers and schools on the one hand and pupils on the other, may not coincide.

A related issue is raised by the Hargreaves Committee, ILEA (1984), when it is shown how schools label disaffected pupils as problems on the grounds that they do not tidily fit into the established system.

The most urgent need, we believe, is to change the way in which we perceive these pupils. At present in this country we tend to treat the pupils who do not fit into the secondary school as problems: they are pupils who are labelled as 'difficult' as 'deviants' or as 'misfits'. There is, it is said, nothing wrong with the school but there is something wrong with the pupils who reject the school. Quite rightly we do all we can to help such pupils to adjust to school like the majority of their peers, but, when our attempts to integrate them fail, we tend to respond in one of two ways. The first response is often to be punitive by suspending the disruptive pupil. The second response is to reject them.

The misfits are best catered for if they are placed outside the normal school, in a special class or a special unit, where people with the appropriate expertise, skill, or interest can cope with these pupils, leaving ordinary teachers or ordinary pupils free to get on with the normal business of schools. (p. 89).

Thus, when schools are faced with pupils who do not readily meet the schools proscribed rules and regulations the problem is not so much faced up to as negated by getting rid of the difficult pupil.

Indeed, it may legitimately be claimed that the premise on which the 1978 ILEA disruptive pupil fund was built was an 'undertaker syndrome', involving as it did, a concept of get rid of the body at any cost (ILEA 5141, 1985).
Reid (1986) feels that the way forward is clear, if schools do not change rapidly, then the present levels of disaffection and the various manifestations of this behaviour could continue to rise dramatically to a point where, in the long run, the consequences of having large numbers of unemployed, unskilled, disillusioned and alienated youngsters and adults alike will start to undermine society, as these people wittingly or unwittingly seek their revenge upon those who have let them down.

We have already seen the other side of the coin where Lloyd-Smith (1984) makes the point that disruptive behaviour immobilizes the normal interchange between pupil and teacher, thereby justifying the removal of the disruptive pupil from his normal school setting. But, this poses the central question of why are the pupils disruptive?

Cashdan and Pumfrey (1969) are clearly of the view that aspects of the school contribute to pupil disruption and disaffection, such that it may prove an unsuitable environment in which a pupil with a history of disruptive behaviour, can make good. This is a serious reflection on the concept of the Comprehensive School and warrants further analysis of specific school functions.

Upton and Gobell (1980) apparently agree and contend that if a more adequate conceptualisation of behaviour problems in schools is to be developed, then schools
must begin to consider the possibility of adjusting the school regime to suit the needs of the pupils concerned.

Gregory (1980) cites a number of cases where children were referred to the Psychological services, whose problem behaviour could be related to organisational, administrative and staff factors in the mainstream school. Poor curriculum and the tendency of some teachers to goad pupils can be covered up by a policy of referring pupils to the Educational Psychologist as scapegoats when in fact it is the school rather than the child that is in need of attention. Hence, as Gregory goes on to say, we should direct our attention to improving the school system. Unfortunately, the use of off-site special units may detract from this.

Burden (1981) similarly argues that problems do not always, or even usually, arise from within individual pupils. The answer should, therefore, be found within the school not outside of it in units and referral to an off-site unit restrains us from seeking the seat of the problem.

Steed et al. (1983b) put it this way, "It is much easier to explain misbehaviour in terms of the child's wilfulness than it is to do so in terms of the situation in which he has been placed and found wanting." (p. 4). They go on to point out that teachers often explain disruptive behaviour in terms of home background and, thereby, attach the label of
deviant to the pupil. This is, among other things, a coping strategy designed, at least in part, to justify events by an explanation which is kind to the pupil, when the teacher may well feel guilty at harbouring such unkind thoughts. It is a useful strategy in that it can bring other parties into play, i.e. welfare and psychological services, who help by sharing the burden. The responsibility for removing the disruptive pupil from school can then be seen to be shared.

The significance of the point is driven home with some pointedness by Schostak (1985) in his book appropriately entitled 'Maladjusted Schooling'.

Clark (1986) has said that, with an essential backdrop of organisation theory, curriculum reform and a review of problems as centred in the interaction between elements rather than in the elements themselves, it is necessary to return to the classroom where major responsibility lies. Clark insists that greater child-centredness is advised with increased counselling and pastoral care and greater flexibility in the content of classroom work.

The importance of personalised care for the individual child has been expounded by Rabinowitz (1981b). Rabinowitz has a vision of the school as a village. The pupil deserves the care that the villager in a close-knit community might have. The image implies a new level of responsibility which, were it developed
and practised, would have implications for society. Certainly dreams are made of such stuff but a re-appraisal along these lines must be made if a valid and far-sighted approach to disruptive behaviour in secondary schools is to be attempted.

This may be even more true of the Primary School and Lawrence and Steed (1986) have reported on a survey of English primary school Headteachers and Educational Psychologists' opinions on disruptive behaviour and conclude that 62% of Headteachers and 31% of the Psychologists believed the onset of disruptive behaviour was getting earlier.

It is pertinent to utilise an analogy to say that evidence from successful schools suggests, tantalisingly, that given a good knowledgeable cook, there are identifiable ingredients from which a recipe for a good school could be constructed. Get the recipe right and you will have a happy school, relaxed teachers, satisfied and successful pupils, high standards of achievement and good behaviour: get it wrong and you create stress, resentment, defensiveness, anger and alienation. (Rutter, et al. 1979), (Reynolds, 1976b).

A key issue, however, is the extent to which Comprehensive Schools as at present constituted, may fail to provide an appropriate 'kitchen' within which 'cooks' can work to get the recipe right. Reynolds et al. (1987) has shown that there are marked
differences in respect of evidence of pupil disaffection in comprehensive schools compared with schools where a selective entry system is applied.

Reynolds and his colleagues explain this difference by drawing attention to the problems of poor management for the comprehensives' large sizes, lack of pupil involvement, 'bureaucratised' pastoral care, enforcing strict rules and an over-emphasis on academic attainment at the expense of social development.

The researchers say that Comprehensive Schools must divert their attention away from the top third of the ability range towards the other sections and types of pupils. They argue for concern for the social as well as the academic goals of the schools with a pastoral care system geared towards personal and social development instead of just 'controlling' pupils.

Steed (1986) maintains that the myth of the orderly school has developed. The Black Papers of the early 1970s and the spread of off-site units for disruptive pupils, have in common a reliance on the myth of the ideal pupil and the myth of the orderly school. Both have their origins in the old Grammar School and neither is helpful in understanding the experience of the vast majority of pupils who attended Secondary Modern Schools or the Comprehensive School pupils of today.
Implicit in the Comprehensive School system is the notion that the needs of a varied range of different pupils are to be catered for. Indeed, the advocates of the system would claim this to be its central virtue. In these circumstances, we must accept more disruptive pupil behaviour and can no longer create the illusion that schools can be without disruptive pupils.

If the only way of creating conflict free schools is to separate out discordant elements by a form of educational apartheid, i.e. by transferring difficult pupils to off-site special units, then this may be deemed by some educationalists as too high a price to pay.

Yet there is another side to the argument and this is the sheer difficulty involved in helping children to learn under typical classroom conditions.

The school classroom is simply not a good environment for carefully monitoring a child's progress, diagnosing difficulties and discovering exactly where a particular child has gone wrong, even less directing him along the right lines.

Most educationalists agree that teachers are not adequately trained to do these things, which are difficult to achieve but vital if children are to gain the maximum advantage from the time they spend in the classroom.
Hart (1987) shows the close relationship between student teachers' anxieties and pupil disruption but there is a lack of evidence to show that newly trained teachers carry new thinking on disruption into the classroom situation.

Meanwhile, some pupils will be disaffected and disruptive, and the school is left to ask how the needs of these pupils can be best catered for.

The answer does not come easily and much of the literature on the subject fails to give due attention to the wider social and economic problems which impinge on school order on the grounds that the teachers in schools have no control over these. As Tattum (1986) puts it, even if teachers did have some direct influence we may question their right of involvement. On the other hand, teachers do have professional influence over what goes on in schools.

The point is understandable, but it suggests that there is a pervasive sense in which the school can work cut off from the outside world and that teachers merely have to turn to the technical problems that arise when expected order falls down or when learning situations prove ineffective.

This standpoint makes it very difficult to develop a discussion of what counts as an educational standpoint through which to critique school practices, relationships, curricula and in particular teacher
responses to what they experience as disruption.

We are left to ask such questions as, What counts as an educational standpoint for pupils? and What counts as an educational standpoint for teachers? What is it that is at issue in the lives of young people whom teachers call disruptive? What educational standpoints may teachers and pupils take towards these? The answer to these questions tend to be provided by means of descriptions and evaluations of such management techniques as counselling, behaviour modification, referral to special units, setting out their stated efficacy but doing so quite independently of any notion of an educational perspective through which such techniques could be critiqued.

It seems odd, therefore, that so much credence is given to the integration into the existing mainstream system of pupils who display behaviour problems. Indeed, Galloway and Goodwin (1987) ask the question, why is the proportion of children following separate and potentially disadvantaged curricula in separate special schools or units remaining constant, if not increasing where there appears in theory to be a broad professional and political consensus in favour of integration.

The answer must surely rest in the adequacy and relevance of the mainstream school for disaffected pupils. There seems little point in integrating or reintegrating a disaffected pupil into a situation
that bears a heavy responsibility for his disaffection.

Cashdan and Pumfrey (1969) have suggested that if a pupil is returned to a situation which initially contributed to his need for remedial help and the situation is essentially the same, then regression seems extremely likely.

This presupposes, of course, that the attitude of the pupil for whom reintegration is sought has changed whilst the attitude of the mainstream school teachers have not.

There is, however, research evidence to suggest that a viable response by schools to disruptive behaviour might well involve action taken to produce attitude change among the teaching staff.

An interesting relevant research undertaking is reported by McNamara, Evans and Hill (1986) from which they conclude that it is feasible to change teachers' attitudes to children who display disruptive behaviour whilst also making more acceptable the behaviour of the pupils. As a result of utilising a behavioural intervention package, they found that not only did pupil behaviour improve, but more significantly that the rates of teacher positive and negative verbal behaviour per 45 minutes altered notably. Initially, the teacher was observed to be at least three times as negative as positive towards the children. This
reliance on negative control strategies is consistent with other surveys (White, 1975), (Thomas, et al. 1978).

McNamara, Evans and Hill found, however, that teacher positive behaviour increased by 59 per cent following the intervention exercise. We are left with the tantalising question of whether pupil behaviour changed as a result of the intervention, thus giving rise to change in teacher positive behaviour, or whether, just possibly, teacher behaviour became more positive as a result of the intervention, resulting in improved pupil behaviour.

Sherman and Cormier (1974) demonstrated that increases in levels of pupil appropriate behaviour brought about by means independent of the teacher, produced an increase in the relative level of teacher positive responses to that behaviour - attributable to the increased availability of appropriate behaviour to which the teacher could respond.

A consideration of reciprocity theory (Patterson and Reid, 1971) lends theoretical support to Sherman and Cormiers' view in that it predicts that teacher behaviour should change as pupil behaviour changes; their view too is compatible with that of Tharp and Wetzel (1969) who have long conceptualised social interactions in terms of two-way reinforcement.

Raymond (1987) shows how the climate and style of
teacher-pupil interaction may be changed when an entire class was referred for being difficult to manage. By interviewing the pupils and observing them in role-play situations, Raymond noted the extent to which they had lost respect for teachers as a result of teachers not carrying out threats, or calling in other teachers to do their disciplining or simply not getting lessons under way promptly or writing on the blackboard and not effectively teaching the pupils. Both the disruptive pupils and the non-disruptive pupils used as a control, commented on the extent to which teachers gave the impression that they were unhappy and did not want to be with the pupils. As Raymond says, it is hardly surprising that pupils gave the same message back and especially so if they saw little practical purpose in the work they were asked to do.

She goes on to show, however, that teacher attitudes can change when this information is made known to them.

Another study of a single class of difficult pupils concludes that by drawing up a joint code of practice, which allows for the recognition of mutual 'personhood', more reasonable behaviour may result in respect of both pupil and teacher (Cronk, 1988).

It was clearly with the same message in mind that Meighan (1978) had earlier argued that pupils can give insightful accounts of teacher performance and that
teachers' performances can be improved notably by listening to such accounts.

Wragg (1982) makes a closely related point when he says that rather than teach teachers alternative methods of dealing with pupils who display behaviour problems, it is usually a good idea to involve pupils in the scrutiny of their own behaviour and consult them on the best way to change it.

Booth and Coulby (1987) stress that schooling is not created anew by each generation of teachers; they operate within institutions and under constraints not of their choosing. Having said this, they go on to point out that viewing difficulties in learning as arising from the relationship between pupils and curricula can enhance the contribution of teachers to their own working lives, as well as to the lives of their pupils.

The point is of some considerable significance and it may well be that the general sense of success that many teachers report from various intervention measures, including off-site withdrawal units, arises from the different and more positive approach of teachers in special classes and units towards pupils, compared with the approach of some teachers in mainstream schools.

The inference is that at least some responsibility for the level of disruption found within schools must rest
upon the institution. Indeed, much of the literature reviewed above is emphatic in the view that the explanation of disruptive behaviour should rather be sought within the school than within the individual pupil. Schostak (1985) speaks for many when he describes the school as 'maladjusted' rather than the pupil.

More than one authoritative writer suggests that the nature of the comprehensive school is such that it fails to meet the needs of some pupils and that in such circumstances the practice of referring difficult pupils to off-site units may tell us more about the inadequacies of the schools than about the inadequacies of the pupils.

It thus becomes yet more clear that such issues as referral and reintegration, which as stated previously loom large in much of the literature pertinent to off-site units, may be irrelevant. In the light of the literature reviewed above, it would appear that there would be greater value in pursuing in more detail the question of the influence of the school in creating disruptive behaviour and in the potential for the school to take corrective measures.

This section of the literature reviewed suggests that it is too easy to blame the pupil for all aspects of displays of disruptive behaviour. It is also too easy for the school to bestow responsibility upon the child's home and family circumstances. The school
itself must accept some responsibility for the development and alleviation of pupil disruptive behaviour.

This is, however, a somewhat 'generalised' comment and it would be helpful to probe the literature further to see if such responsibilities may be devolved on all schools or on some particular schools. Or again whether factors influencing the onset and/or development of disruptive behaviour can be found in specific aspects of the school process, such as the system of rule enforcement. It would also be enlightening to consider further, the pupils' own perspective, for this may tell us much that is revealing about the quality, consistency and relevance of that which constitutes the school process.

These matters will be considered further in the ensuing sections of the literature review.
10. The School as a Place of Work and the Relevance for Disruption

Having established that the school may be more responsible for the disruptive behaviour found within it than hitherto admitted, it is necessary to be more specific and ask whether reference is being made to all schools, some particular schools, or some facets of some schools. The ensuing section of the literature introduces this line of questioning by considering schools in general within the context of a sociology of work. The point is made that the school as a workplace may be conducive to disruptive behaviour and recourse to off-site special units.

It is noteworthy that empirical research appears to move increasingly to the conclusion that whether or not fundamental causes of disruptive behaviour are to be located in societal forces beyond the purview of the school, there remains mileage in recognising the possibility for regeneration from within the system (Lawrence, Steed and Young, 1984a). Coulby and Harper (1985) go further and are unequivocal in claiming that since schools generate disruption, then schools can act to minimise it. Both the research of Lawrence, Steed and Young (1984a) and Coulby and Harper (1985), lead logically to the conclusion that the trend in Britain to isolate disruptive pupils in off-site units, should be reversed on the grounds that the solution to the problem of disruption lies within the schools.
Everhart (1983) has argued that schools foster a basic knowledge system which he calls 'reified' knowledge or knowledge that is given, linear, relatively non-problematic, and which places pupils in the role of passive recipients of predigested knowledge. He goes on to maintain that this system of knowledge involves the basic rudiments of a labour process based on exchange values. Pupils exchange their labour for symbols that the school attempts to convince them are valuable. Pupils, on the other hand, like other people in the labour force, attempt to control their labour and thus generate a system in which they have at least some control over their learning and the environment surrounding it.

This line of thinking raises questions about the nature of the school as a workplace and possible contradictions in the expectations of those in control, i.e. the teachers, and those who provide the labour, i.e. the pupils.

Dreeben (1973) has suggested that teacher pre-occupation with minimising disruptive behaviour does not stem from some uniqueness about the people who make up the teaching profession, but rather from the fact that there are special features about the work teachers do, which in turn, creates a force towards a 'teacher perspective' about classroom control.

Denscombe (1985) has taken this point further and has
made a unique contribution to the literature on pupil
disruption by approaching the issue from the
knowledge base of the sociology of work.

Denscombe focuses on, "How certain experiences and
certain pressures are shared by those in any
particular situation and how these can shape the
attitudes and approaches of those involved." (p. 7).

He argues that there are probably three factors that
are influential in shaping the teachers' perspective
about controlling disruptive behaviour in the
classroom.

Firstly, teachers know that pupils may not be willing
partners in all aspects of the classroom routine and
the work of the teacher, therefore, requires a
capacity to establish and maintain classroom control
in respect of a sometimes recalcitrant clientele.
The school differs from other institutions in the
exercise of control over its workforce in that it is
expected of the teacher in the school that he or she
will maintain order in isolation from other adults.
Indeed, the less the teacher finds it necessary to
consult other adults or seek their support, the more
he or she is held in esteem by other teachers. This
situation leads logically to the second factor which
is the organisational structure in the school,
complete with its supporting norms, and which
reinforces the autonomy and isolation of the teacher.
The third factor is the extent to which teachers have to rely on personalised authority and commitments in order to gain control. Whilst rules and sanctions do exist and can be invoked, if necessary, since teachers must work almost in isolation with pupils, a delicate balance between coercion and involvement in learning, has to be maintained. This situation, described by Waller (1965) as 'the uneasy truce' allows teaching to continue. Its breakdown must bring into play the option of referring recalcitrant pupils to an off-site unit for disruptive pupils.

Denscombe (1985) locates the nexus of teachers perspectives on classroom disruption in a culture of privacy and the attendant radical individualism that permeates teaching as an occupation.

Yet teachers are not well prepared in their training for the role that this implies.

Bennet, et al. (1984) suggest that most good teachers appear to cope very well with the managerial responsibilities of running a well regulated classroom in which children appear to be busy and reasonably contented. When it comes, however, to ensuring that each child is engaged in activities that really lead to useful and relevant outcomes, teachers are much less successful. The training given to teachers provides them with little information about how to 'manage' a classroom, given
the complex interrelationships outlined above. They have little first hand information about how other teachers manage their classrooms. Indeed, as Denscombe (1985) points out, pupils have more direct information about this topic than do teachers, since they observe teachers each day. Teachers must, therefore, rely on the publicly available indicators of control. These include, orderliness, absence of noise, courtesy to the teacher, etc. Such criteria become the criteria for good management and it is understandable in such circumstances that teachers resist curriculum change, or anything that questions the teacher's managerial ability, according to this crude measuring rod.

It is thus suggested that managing disruptive behaviour in the classroom has become a part of classroom dynamics - a curriculum in and of itself (Giroux, 1983).

According to this view, in order to understand and reduce levels of disruptive behaviour in school, it is necessary to seek the source of disruption in the nature of the workplace and specifically examine characteristics of teachers' work in so far as this contributes to their pre-occupation with classroom control.

Disruptive behaviour exists in the workplace, whether it be a factory or a school. Apple (1982) has commented that,
Study after study has confirmed the fact that a large proportion of working adults have been able to continue their own collective sorting of informal production norms and their ability to defy the supervisor and the expert. (p. 73).

Apple goes on to cite some of these studies and to stress the need to direct more attention to understanding the nature of work and the labour process in the workplace if we hope to alter the social relations of production.

Similarly failure to take such action may serve to extend our hysteria about disruption in the classroom and delay the emergence of more fundamentally progressive solutions. (Denscombe, 1985).

It would seem that understanding pupil disruption requires us to unpack the nature of the work process, which is itself a fundamental regulator of the social order of schooling.

It may well be that much could be learned about disruptive behaviour in schools from the experiences of disaffection and disruption in the industrial and business workplace.

Certainly the literature reviewed above, suggests that not only does disruptive behaviour exist within workplaces in general, but in schools especially relevant issues are present. It would seem that the process of teacher training and the nature of the teachers' role lend themselves to the creation of a pre-occupation with classroom control. In these
circumstances disruptive behaviour may take on a significance which some observers from other professions might see as paranoid.

This is a far cry from saying that the school as a workplace is a causative influence in the creation of disruptive behaviour, yet teachers pre-occupation with order and control could account for a ready recourse to the use of off-site special units for disruptive pupils.

What is more, as Tattum (1986) has pointed out, it should be within our powers to make changes in the workplace of the school if we are satisfied that such changes may improve levels of disruptive behaviour. It seems logical, therefore, for research to concentrate on the impact of the school on pupil disruptive behaviour.

It would thus be fruitful to consider further literature on disruptive pupil behaviour in schools in order to pursue the question of whether some schools are indeed more conducive to such behaviour than are other schools.
11. **School Differences**

The relevant literature under this heading is reviewed to show that there is a substantial volume of evidence, extending over two decades, and demonstrating that schools do make a difference to pupils' behaviour. To this extent, the literature not only supports the preceding section but goes further to suggest that more disruptive behaviour is displayed in some schools than in others, despite drawing their pupils from common or similar catchment areas.

Several writers (Reynolds and Sullivan, 1976), (Reynolds, et al. 1981), (Rutter, et al. 1979), (Collfield and Goodings, 1983), have indicated that schools do make a difference to pupils' behaviour and the practices schools choose to adopt can make a substantial contribution to the level of disaffected behaviour that is manifested.

This probably remains so, despite the methodological and measuring difficulties involved in such studies (Hargreaves, 1980). Indeed, Steed, Lawrence and Young (1983a) in confirming earlier studies, suggest that schools are far from helpless in the face of pupil disruption and that there exists considerable untapped resources among staff which can be activated and utilised in coping with disruptive incidents. The point is taken as accepted by Chisholm, et al. (1984) in an in-service training package which aims
to prepare teachers to prevent disruptive incidents from arising.

It would be relevant to examine findings on the nature of these school factors, drawing on two main types of source. The first consists of those pieces of research which have established that considerable differences exist between schools in respect of their rates of suspension and referrals to other agencies, and in delinquency among their pupils. Other research undertakings in this category have analysed aspects of school ethos and organisation which are associated with differing rates of pupil disaffection.

The second type of source comprises the explanations of disaffection provided by the pupils themselves. Certain aspects of school life have, for example, been identified by them as potential precipitating factors in their behaviour.

The second point will be returned to. Here and now, those references which consider the way in which some schools differ from others in the extent of the disruptive behaviour observed within them will be reviewed.

An important pioneer research study by Power (1967), provided the first indication that schools might be exerting an independent effect on pupil behaviour by demonstrating that schools in Tower Hamlets differed
markedly in the delinquency rates of boys attending them. A subsequent study in Croydon (Garth, Cooper and Gattoni, 1977) also found independent variations in juvenile delinquency rates which were associated with rates of referral to Child Guidance. Notable differences between schools in their rate of suspension of pupils were similarly found by a number of researchers, (Galloway, Ball, Bloomfield and Seyd, 1982), (Galloway, 1980), (Galloway, 1982), (Grunsall, 1980a). Galloway's studies further confirmed that these differences were unrelated to variations in the catchment areas.

Bird, et al. (1980) found that schools differed in their use of off-site units and this reflected different practices within the school regarding the handling of difficult pupils. Some schools referred pupils at the first sign of disaffection whilst others referred pupils as a last resort and after alternative school procedures had been exhausted.

Coulby and Harper (1985) further make the point that it depends on which teacher within the school makes the complaint about a pupil's behaviour that determines whether or not referral to a special unit follows.

There is also the point noted by Galloway and Goodwin (1987) that staff who recommend pupils for removal to an off-site unit may be motivated less by the precise nature of the pupil's behaviour and more by fear of
criticism by the Head or other staff if they fail to take such action.

Some research findings have demonstrated that idiosyncratic differences between schools do exist, whilst others have attempted to analyse those aspects of the school ethos and organisation which are associated with particular forms of behaviour displayed by pupils.

The possible effect of school ethos on individual pupil behaviour was stressed by Clegg and Megson (1968). They were concerned particularly with the way in which school practices can divide the slow children from the brighter pupils reinforcing the disadvantages of the weaker ones.

Reynolds in a number of works, (Reynolds, 1985), (Reynolds, 1976), (Reynolds, Jones and St. Leger, 1976), (Reynolds 1976a), (Reynolds and Murgatroyd, 1977), (Reynolds, 1977), (Reynolds and Jones, 1978), (Reynolds and Sullivan, 1979), (Reynolds, Jones and St. Leger, 1980), found that the comprehensive schools in South Wales varied considerably in the amount of school non-attendance despite having comparable intakes. They found that schools with high attendance rates were characterised by small size, lower institutional control, less vigorous enforcement of certain key rules on pupil behaviour, high co-option of pupils as prefects and closer parent-school relationships. Schools with high
truanty rates, on the other hand, tended to be more custodial with high levels of control, strict rule enforcement and an isolation of the formal staff organisation of the school from potential sources of support amongst both pupil and parents.

Rutter, et al.'s (1979) research confirmed the importance of the school ethos. He argued that the most successful schools were characterised by a prompt start to lessons, emphasis on academic progress and attainments, low frequency of punishment and a high rate of recognition for positive achievements, well cared for buildings and a feeling by pupils that they could approach teachers for help with personal problems.

They go on to suggest that pupils' behaviour is influenced very strongly by school climate and that the school climate is in turn dependent on a wide range of factors that extend beyond any single classroom.

Coulby and Harper (1985) approach the same point from a different angle and "... remain convinced that behaviour could not be changed without concentrating on the environment and the context as well as on the referred child." (p. 99).

Galloway and Goodwin (1987) touch on another aspect of the school ethos and climate when they suggest that schools which cater well for their most
vulnerable children, tend to cater well for the rest of their pupils.

Reynolds (1976b) suggests that schools with low rates of absenteeism and delinquency establish a 'truce' with working class pupils in which certain rules are not enforced stringently in exchange for co-operation in other aspects of school life. This may be seen as a way in which schools can accommodate themselves to pupils who do not share their dominant values.

Bird et al. (1980) make a reference to a similar phenomenon in certain London schools and draw attention to the dangers inherent in the practice since it probably constitutes a means by which facing up to the pupils disaffections can be avoided. Such practice includes ignoring pupil absence, excluding pupils from lessons, bartering for good behaviour which, in effect, allows individual pupils to opt out of the mainstream and follow an individual programme.

Evidence from the United States draws the same conclusion. Cusick (1983) suggests that teachers and students seem to strike a muted, negotiated order in which teachers often 'know' that the ultimate objective of teaching, as far as the organisation and administration of the school are concerned, is to get along with students. This is not to suggest that teachers should be friends with pupils but more that they perceive a need to portray an image to other teachers and to the administration that they are in
fact, in control (Sedlack, Wheeler, Pullan and Cusick, 1985).

If teachers can maintain a modicum of order, receive reasonable approval from pupils and keep from referring too many pupils to the administration for severe disciplinary problems, then they are free to embark on just about any instructional strategy they choose, thus remaining relatively autonomous of administrative direction. The strategy chosen often does not demand much academically from students. Students, in return for this minimal challenge, get by academically and can still 'muck about' as long as their behaviour is not disruptive. Such an exchange constitutes the unconscious, but no less real, negotiated order of the classroom (Everhart, 1987).

The amount of research undertaken which concludes that schools do make a difference to pupils' behaviour, is now considerable. Over a twenty year period, evidence has been offered suggesting that school differences in rates of delinquency, suspension and disruption are unrelated to variations in the catchment areas. It seems reasonable to conclude that a careful analysis of such differences could lead to changes in schools which might reduce levels of disruption. It is somewhat surprising that many schools prefer to pursue a policy of corrective measures (including referral to off-site units) and negotiated order rather than face up to the
fundamental possibility that all may not be well within the school system.

There is evidence in the literature reviewed confirming the conclusions of the previous section, that schools in general may well incorporate features that are conducive to disruptive behaviour. Most significantly, however, the literature reviewed above confirms that some schools display levels of disruption over and above that displayed by other schools and that the catchment area cannot be offered as an explanation for this phenomenon.

It would seem illogical in these circumstances to seek explanations in terms of 'within pupil' causes. Rather, it would appear more likely that an analysis of aspects of school procedures might yield greater enlightenment. Those features of the school of which the effects are reasonably well documented, are in particular, school rules and the curriculum. References to these areas will, therefore, be reviewed further.
12. **Infringement of School Rules**

The immediately preceding sections of the literature review have seriously questioned the view that explanations for causes of disruptive behaviour must necessarily be sought within the pupils themselves. An argument has been opened up to suggest that schools may also be responsible. This section of the review commences a consideration of specific facets of some schools which may bear an especially heavy responsibility. The available evidence suggests that the manner in which school rules are enforced and the schools expectations in respect of the treatment of those who infringe the rules, may contribute directly to levels of disruption within the school.

There are a number of ways in which schools demonstrate their failure to appreciate the causes of disruptive behaviour. Of these, infringement of school rules is often the first step in the process that, in the view of the teacher, marks out a pupil as a potential trouble maker, leading eventually to more serious confrontations (Littler, 1983).

Pupil comments indicate that some rules may be infringed through no fault of their own, and may be resented as an unjust imposition in the light of their developing adult status. Others may, of course, be enforced inconsistently by teachers (Tattum, 1982), (Gillham, 1984).
In most schools there are some teachers who have more disciplinary problems than others and the possibility cannot be ignored that a teacher's behaviour is a contributory factor to a pupil's disruptive response. Werthman (1963) examined the problem of why some American High School pupils behaved badly in some lessons and not others and concluded that pupils do not grant the teacher automatic and total authority in the classroom. Rather, they set rules which a teacher must meet if he or she is to be granted authority. Teachers must apply discipline fairly and consistently; they must not bully or be over-domineering, and so on. In another study of an American High School, Duke and Cohen (1983) identified five categories of discipline problems: inconsistent rule enforcement, non-compliance with disciplinary policies, being picked on unfairly, not being treated with respect and being the recipient of excessive strictness. The same key issues are cited by pupils when they claim that their relationship with a teacher was a cause of their absenteeism or disruptive behaviour, (Tattum, 1982), (Reynolds and Reid, 1985).

Virtually all schools have general proscriptive rules concerning dress, personal adornment and interpersonal behaviour, which are traditional battlegrounds in the secondary school. Additionally
there are also sets of rules governing pupil
behaviour in the classroom which are more complex and
variable. Hargreaves, Hester and Mellor (1975),
Tattum (1982) and Lawrence at al. (1981), have
analysed the different rules which are normally in
force in the classroom, constraining movement, talk
and behaviour, and have recorded the occasions on
which these may be relaxed. Hargreaves, Hester and
Mellor (1975) further note that teachers may be
either moralistic or pragmatic in their attitude to
classroom rules, either enforcing them stringently or
assessing the benefits of enforcement against likely
costs in each situation.

By observing children through the day, Hargreaves,
Hester and Mellor (1975) and Lawrence, Steed and
Young (1978a) demonstrate the level of sophistication
required of pupils to adapt their behaviour to the
nature of the classroom tasks, the demands of the
subject and the individual requirement of the
teacher, all of which may change radically at
intervals throughout the day.

Pupils may find themselves in trouble with one
teacher for behaviour which is tolerated by another,
or lack the social skills to adapt to the changing
demands made on them.

Reynold's (1977) research findings from schools in
South Wales suggest that the degree of stringency with which schools enforced two key behavioural rules against smoking and chewing gum was positively associated with levels of pupil absenteeism and delinquency.

It is of course, also the case that teachers can experience stress when faced with aggression from pupils and a continual context of noise and disorder may lead the teacher to feel impelled to withdraw from the situation using sick leave for the purpose (Wedell, 1977).

Most teachers and pupils find reasonably satisfactory ways of co-existing but the pressures which are built into the teacher/pupil relationship do have the potential to create stressful situations from which both parties may feel the need to withdraw (Gillham, 1984).

Both sets of experiences reflect circumstances in which the ritual strategies adopted by teachers and pupils to keep their relationship fairly evenly balanced have been taken to excess. These strategies can be analysed in terms of the type of approach adopted, the underlying reasons for it and its ultimate effect on the recipients.

Teachers develop strategies which are primarily aimed
at anticipating and preventing possible challenges to their authority and Hargreaves, Hester and Mellor (1975) demonstrate how this can take the form of stereotyping individual pupils according to their capacity to create trouble. The point was illustrated more recently (Safran and Safran 1985) in a study which showed that 74 school teachers voted five behaviour problems in terms of severity, manageability, tolerance and contagion. Only contagion yielded significant differences, suggesting that teachers held the target child responsible for the classroom disorder.

Information about difficult and disruptive pupils is pooled in the staff room so that new staff are quickly informed about potential trouble makers and encouraged to respond accordingly. The results are inconsistent since teachers vary considerably in the strictness of the regime they maintain within their classes, with some teachers feeling the need to respond to the first hint of a challenge to their authority (Littler, 1983).

The issue of control and the preservation of authority is central to the teaching profession for a number of reasons. Teaching makes demands on the resources of teachers and places them in a particularly vulnerable position relative to those pupils who may be disillusioned and disaffected in
their final years at school (Herson and Berg, 1980). Additionally, certain subjects may need to be taught to a tight schedule requiring the maximum order and attention from pupils and any interruption of this through disruption or absenteeism can create problems.

A possible consequence for pupils is that once a reputation is gained for troublemaking, teachers are continually on the alert for any fresh outbreaks and new teachers are warned in advance about certain pupils, thereby preventing the formation of a sound pupil/teacher relationship.

In such circumstances it may prove difficult for the pupil to demonstrate that a genuine improvement in conduct has taken place and to be believed. (Buist, 1980).

There is the further point that when authority is deemed by pupils to be exercised with excessive strictness, pupil reaction may well be provoked. Schostak (1982) reports some research on pupil attitudes to teachers in a northern school, which indicates how deeply pupils resent being called names, physically manhandled, never allowed to act on their own initiative and continually supervised.

The resultant pupil strategies have been well
examined by a number of researchers, such as Nespor (1986), Corrigan (1979), March et al. (1978), Willis (1977), Hargreaves (1967) and others.

These studies have made important moves to uncover some of the rules and norms which govern the behaviour of pupils, especially working class boys, at school. They describe two major forms of universally accepted behaviour, i.e. testing out teachers and messing about.

It is normal for pupils to test out teachers and this can be seen as a necessary way of establishing each teacher's tolerance level.

Messing about takes the form of a moderately disruptive subversion of the orderly school routine which is generally regarded by pupils as a natural reaction to boredom and constraint. Hastings and Schwieso (1987) refer to a study in which a third of all misbehaviour recorded was characterised by 'talking out of turn' as opposed to any more serious act of disruptive behaviour.

In general, teachers take these challenges in their stride but those who have difficulty maintaining control, or have to teach unpopular subjects, may find the noise and disturbance levels in their classes rising above tolerance limits. The teacher
may then react strongly to an individual incident which in other circumstances might well have been overlooked (Lawrence et al., 1981). The consequences for the pupil may be such as to set him/her on the road to possible suspension or punishment which might be deemed excessive by outside observers (Littler, 1983).

Schostak (1985) argues that children have the educational right to challenge certain things such as racism, sexism, material disadvantage and other forms of social inequality and discrimination. If this is so, then the educational role of teachers is to facilitate this. Such an educational role clearly dismantles the authority of the teacher as the custodian of right and wrong answers and as a controller of behaviours.

In such circumstances, it is not surprising to find a head of a special unit who sees his role as one of repairing the moral order breached (Lloyd-Smith, 1987).

Such reparation of the moral order would, presumably, involve a reassessment of the systems of rewards and punishments that are brought into play when school rules are infringed.

Zabel (1986) surveyed 730 teachers of behaviourally
disordered pupils and found that 70% of the teachers used time-out procedures as a behaviour management strategy despite the lack of any evidence to justify the procedure as an effective technique for improving pupils' disruptive behaviour.

Smith et al. (1987) compared samples of pupils in regular and special education and concluded that externally imposed control restrictions, including time-out procedures, are not only ineffective but may prove to make disruptive behaviour worse. They go on to argue that we must move to interventions that, "... emphasise enhancement of perceptions of control and self-determination." (p. 175).

Kelly (1987) has shown how disruptive behaviour, including severely disruptive behaviour, can be improved by a simple programme of rewards based partly on the principles of operant conditioning and partly on a contractual agreement with the pupil. Such a contractual agreement included feedback to the pupil by the teacher about progress, the offering of advice and other positive aspects of encouragement.

A research study reported by Hasting and Schwieso (1987) claims that the 'average child' receives 10 times as much disapproval for inappropriate behaviour in school as praise for good work. The significance of the point is driven home by Scherer (1987), who
reports on a group of studies where teachers used different reinforcement techniques and found improvement in levels of disruptive behaviour, irrespective of technique. It would seem that the fact of the teacher refraining from excessive concentration on signs of disapproval and greater reliance on positive encouragement, can itself lead to behaviour improvement. The point returns us to an issue raised previously confirming the suggestion that attitude change can work for both teacher and pupil.

In the absence of changes in attitude, the literature reviewed is clear in the conviction that school rules are sometimes enforced inconsistently and sometimes excessively and that pupils will often respond to such circumstances with disruptive behaviour.

Schools frequently respond to rule infringement by seeking a successful outcome in terms of the pupils' behaviour change. Greater success may result from studying professional practice which will encourage us to emulate rather than change (Galloway, 1987).

It would be interesting to seek similar messages in the relevance of the school curriculum to disruptive behaviour to see if there is evidence to suggest that the curriculum, like school rules, may display aspects of inappropriate application conducive to a
disruptive response.
The School Curriculum

Just as literature concerning the schools' responses to the infringement of school rules assists us in understanding more fully the reasons why disruptive behaviour may develop as a response, so too does literature on the curriculum. A review of literature in this section shows that if the curriculum presented to some pupils is perceived by them as irrelevant or beyond their ability, then disruptive behaviour may follow.

Berger (1982) makes the point that if we are to respond with understanding to the needs of the pupil who displays behavioural problems, then it is insufficient to concentrate on the classroom behaviour of teachers and pupils. It is also necessary to attend to the wider aspects of the school curriculum.

Reynolds (1985) similarly draws attention to the appropriateness of the curriculum in any debate about disruptive behaviour. The same point is reiterated by Cohen and Cohen (1988) who stress the importance of acknowledging the influence of the curriculum on pupil-teacher relationships.

Bird et al. (1980) have identified four main ways in which the pupil's experience of the curriculum could be adverse; if they found it irrelevant, if they
could not relate to its academic slant, if they could not meet the demands it made of them and if it left them with a sense of failure. Research findings from studies carried out in the United States confirm the point (Marin, 1980). These findings are also reinforced by pupil comments on the curriculum (Lawrence et al., 1981).

Coulby (1985) has argued that working-class language, values and activities, are lacking in the curriculum and need to be incorporated as areas of potential success in school. He goes on to argue that the curriculum needs to be opened up for negotiation with pupils and their parents. Such negotiations would need to cover all aspects of the curriculum and all phases of education. A curriculum revitalised along these lines might well be one which would play a major part in the reduction of disaffection, especially if it works to allow working-class pupils the opportunity of experiencing success in school.

A number of writers (Fogelman, 1978), (Galloway et al., 1982), (Youngman, 1982), (York, Heron and Wolff, 1972) and others, are agreed that disruptive pupils often have serious learning difficulties with the curriculum. A key finding in most studies has been that the children are generally bright enough to know they are not matching up to the school's
demands. Teachers may underestimate the genuine difficulty some children have in understanding what is required of them (Sharp, 1981), (Anderson, 1980).

Pupil comments recorded by (Buist, 1980), (Anderson, 1980) and others suggest that in the early secondary school years children are sensitive to school assessments of their ability and conduct and will miss specific lessons to avoid conflict with teachers and the experience of failure. They may also disrupt lessons to distract attention from their difficulties.

Raven (1979) argues that the process of labelling pupils as disruptive often stems from the extent to which some schools systematically undermine pupils' confidence by their concentration on failure rather than success. It is possible that some pupils disrupt lessons and refuse to do work, not because they wish to defy the teacher but because they are deeply afraid they will not succeed and cannot tolerate the sense of failure. In these circumstances it is rational to refuse to work because the stigma of poor marks and teacher ire become bearable only so long as one can tell oneself that one is failing not because one is stupid but because one never tried. As they get older, however, the school's assessments of their work and general competence as individuals may assume less
significance in the light of the confidence gained from successful experiences in other areas of their life, such as part time employment, family responsibilities and peer groups (Bird et al., 1980).

Certainly there has been a consensus of findings that behavioural problems are more prevalent in children who show learning difficulties. In his consideration of children in special units, Daines, (1981) observed that a very large proportion had literacy problems.

Glavin and Annesley (1971) found that 82 per cent of boys displaying behavioural problems were under-achieving in reading with 50 per cent of them being in the extreme group of poor readers compared with 21 per cent of the non-problem boys.

Coulby and Harper (1985) make the point that pupils who do not learn sufficiently quickly to read and write are often the ones who, spurred on by frustration and boredom, engage most enthusiastically in disruptive activity.

In studies of case histories of boys in two Community Homes with Education, Littler (1982b) found that without exception pupils achieved reading age scores below their chronological ages.
Riding and McQuaid (1987) tested all 16 year old pupils in two Comprehensive Schools, whose reading was considered to be substantially below average by their teachers. The pupils were given a reading test to determine poor and very poor readers. They were further compared with a group of competent readers from the same schools in respect of the personality characteristics of introversion-extroversion and stability-neuroticism performance on Ravens' Matrices. The poor readers differed significantly from the good readers in terms of the number of pupils who scored low on Ravens' Matrices, i.e. tended to be introverted and neurotic. Only two of the control group of good readers had a Ravens' score of 44 or below, whilst sixteen of the poor readers and twenty-two of the very poor readers scored 44 or below.

Chazan (1964) had earlier found that using the Bristol Social Adjustment Guides, the mean scores for maladjustment of educationally sub-normal boys and girls were 16.6 and 17.6 respectively, compared with 9.6 and 8.2 for normally achieving controls. This is close to a critical score in the case of the educationally sub-normal group, on the edition of the BSAG in use at the time.

Similarly, Morris (1958) obtained mean BSAG scores
for 9 year old good readers of 10.76 and poor readers of 3.34. Lambert and Nicoll (1977) found negative correlations of 0.41 to 0.47 between reading attainment and maladjustment of both acting out and neurotic-withdrawal types.

There would seem to be a notable, if somewhat confusing, relationship between maladjustment, in terms of behaviour problems, and academic attainment.

On the question of whether difficulty in reading produces the observed behaviour problems, or whether an original maladjustment is responsible for reading difficulty, there is a lack of consensus.

Yule and Rutter (1968) have suggested that it was unlikely that psychiatric disorders as such led to reading failure. They admitted that their evidence was circumstantial, being in fact based on the observations of differences in the family characteristics of maladjusted children who were not backward readers. Vernon (1957) has concluded that in some cases the emotional difficulties were the primary and fundamental factor whereas in others, the emotional difficulty is largely caused by the reading ability.

Both McMichael (1979) and Stott (1982) have taken
these impressionistic comments a step further by designing studies to test the extent to which when maladjustment and reading retardation are found in conjunction, one is the cause and the other the effect. McMichael established that in a considerable number of cases an anti-social form of classroom deviance would appear to precede later reading difficulties and Stott apparently confirms the view. Both writers, however, refrain from the conclusion that this is necessarily in all cases inevitably the case. McMichael, for example, makes the point that it may be that the pupils involved in her study are too young at mean age 6¼ years to respond with anti-social behaviour to the frustration and disappointment of failure in school. It is possible, as McMichael suggests, that difficulties experienced by pupils in school may not be perceived as disappointments until children can fully understand the pressures of parental expectations of their performance.

Needless to say, all the emotional concomitants of learning failure, whether causative or reactive, result in inappropriate learning and problem-solving behaviour. Pupils seek distractions, fiddle with objects, fidget, adopt unsuitable postures, look for excuses to leave their seats or complain of minor illness. Whatever the excuse, it serves to hinder attention and inhibit the reflectivity necessary for
concept formation, or alternatively, takes the form of a lack of confidence or avoidance to the extent that the learning process may not even be initiated.

Irrespective of whether the genesis of many reading and behavioural problems may be found within the school or outside it, a number of issues follow from a demonstrable relationship between disruptive pupil behaviour and poor school attainment.

Firstly, the early identification of behaviour disturbance and its alleviation is necessary if failure in basic skills is to be reduced, although there is a lack of evidence supporting the view that problems in adolescence have been reduced by treatment at an early stage (Barton, 1984).

Secondly, irrespective of the causes of the behaviour disturbance, remedial efforts should also be directed towards the correction of these faulty learning styles by specific training in learning skills (Stott, 1978). Thirdly, it has to be recognised that probably as many as one-fifth of young children suffer from handicaps of motivation and behaviour which impair spontaneous learning and that the resulting behaviour problems and concomitant faulty learning styles call for sophisticated teaching methods which will induce
confidence, stimulate motivation and reinforce attention and reflectivity (Stott, 1982).

Fourthly, the significance of behaviour disturbance in the general complex of poor coping must surely cause us to review the traditional concept of 'learning disability' as central process dysfunction. It has to be seriously considered whether the generally accepted division between pupils who display behavioural problems on the one hand and those who are deemed to have learning difficulties on the other, is but an artifact of the assessors' viewpoint and the diagnostic tools employed. According to Wright (1974), up to 50 percent of boys referred as conduct problems could have been referred as 'learning-disabled'.

The point is a telling one and reiterates the theme of the literature reviewed above, that learning difficulty and disruptive behaviour may go hand in hand. Whilst the research evidence cited is less clear on the precise issue of cause and effect, there is a consensus of views expressed in the literature that disruptive pupils often have serious difficulties in coping with the curriculum. In such circumstances it would not be surprising to find that children often respond to the frustration and boredom with disruptive behaviour.
Thus the argument, which has moved on from the suggestion that disruptive behaviour is essentially pupil-centred to the considered view that the school system must at least share the responsibility, progresses further via these findings which look for causation in particular schools to possible explanations in terms of specific aspects of some schools.

The volume of literature stating that a curriculum which is deemed by pupils to be irrelevant, or too difficult or which leads to a sense of failure, may be conducive to disruptive behaviour, is too considerable to ignore.

Indeed, the literature reviewed in this section again tends to confirm the emerging theme that the problems of pupil disruptive behaviour may be alleviated by producing changes in the pupils 'daily diet of schooling'. If such changes are difficult within the context of the mainstream school, then there may be a case for referring appropriate pupils to off-site units where conditions may more easily permit a personalised curriculum in which the pupil finds relevance and in which he/she can achieve a degree of success.

The point is worth pursuing further and could prove significant in an evaluation of off-site units.
To this end, it would be useful to consider the comments made by pupils themselves and especially by those pupils deemed to be disruptive and who have witnessed the experience of being referred to an off-site special unit for disruptive pupils.
14. Pupil's Views on Disruptive Behaviour

A consideration of the literature which reports pupil's views on disruptive behaviour, is unambiguous in supporting the view that the causes of disruption are more likely to be found in inconsistent rule application, goading by teachers, failure to treat pupils with respect and other school features, rather than in terms of pathological explanations relating to the pupils themselves. Pupils feel that such treatment by the school as that cited above, leads directly to a disruptive response.

It is most evident from what has gone before that a valuable insight into both the causes of disruptive pupil behaviour and possible remedial approaches, can be provided by the pupils themselves.

Not surprisingly, there is a shortage of literature on the pupils' explanation of disruptive behaviour and Tattum (1982), therefore, provides us with a valuable additional source of data. On the basis of information supplied by pupils placed in a special unit for disruptive behaviour, he puts forward five headings which summarise the major reasons cited by these young people for their removal from the mainstream school.

Firstly, pupils claimed that it was the teacher's
fault. Research findings reviewed by Docking (1980) indicate that there is a widespread agreement amongst pupils on what constitutes a good teacher, who is expected to be relatively strict but fair, approachable and able to show an interest in pupils. Teachers who are soft, ineffective, rigid, harsh or uncaring or who invite physical confrontations can provoke deep resentment which leads to indiscipline and disruption. It is agreed by most commentators that very few children are universally disruptive and most have a good relationship with at least one teacher (Steed, 1985). Phillips and Callely (1981), arranged for a group of 40 post graduate student-teachers from Cardiff to spend twelve days in 26 schools. The student-teachers interviewed 433 fourth year pupils in an attempt to ascertain their views on aspects relating to their life in school. The results indicate the diverse and idiosyncratic views held by fourth year pupils and the extent to which some aspects of the school day are well liked whilst other are not.

Secondly, pupils complained of not being treated with respect. There is resentment of behaviour by teachers which undermines the self-respect of pupils. Adolescence is generally recognised as a time when young people are aspiring to adult status and are especially sensitive to threats to their self image. Frude (1984) makes the point that most
school 'offences' which constitute disruption in the classroom, such as making a noise, smoking, making sarcastic comments, etc., are purely situational offences. In adult contexts they would be ignored. Hence certain kinds of disruption may be construed by pupils as merely asserting a freedom which is normally given to adults (Nespor 1986). Wheldall (1982) talks of 'behavioural overkill' to describe this situation where teachers respond with unnecessary over-reaction to relatively minor offences which could and should be dealt with within the context of the daily functions of the school.

Thirdly, pupils complained of inconsistency of rule application. The need to manage large groups of children and establish crowd control is sometimes incompatible with strict notions of justice and individual responsibility, and pupils may be unfairly singled out for actions they did not commit. The resulting resentment and resistance can lead to more serious incidents at the time or later on. Gillham (1984) undertook experimental work in a Nottingham Comprehensive School and has made positive recommendations to schools about the establishment of a minimum number of indispensable school rules and their constant application.

Fourthly, pupils insisted that they were just having a laugh. A degree of pupil subversion of the normal
routine is an accepted, if not overtly condoned, part of school life. For some pupils, however, creating a diversion is their main claim to status within their group and they have a need to go beyond the routine misbehaviour of their classmates.

In this same vein of thinking, Sharp (1981) examines the relationship of the disruptive pupil to the rest of the class. Sharp supported the earlier work of Longworth-Dames (1977) who suggests that such a pupil may be conforming precisely to the requirements of his group, and can become trapped in the role and unable to change his behaviour without losing face. How often have adults bragged with amusement of how they made their teacher's life a misery and their esteem has risen accordingly?

Finally, pupils emphasised the role played by the school system. Pupils point to long difficult lessons at the end of a school day, when teachers and children may be both irritable and tired and minor incidents can escalate into major confrontations (Littler, 1983). Researchers who have analysed disruptive incidents, identify peaks of activity when teachers and pupils are furthest removed from natural breaks in their relationship. These are in mid week (Lawrence, et al., 1981) and mid year (York, Heron and Wolff, 1972). Other writers have similarly identified other peaks

On a different but related point (Hesketh 1987) collected information from pupils who had attended an off-site unit and who complained of the 'goading' of teachers, in mainstream school, the escalation of minor misdemeanours and the aggressiveness of the approach of some teachers to a situation which could have been dealt with more calmly and courteously.

All of the pupils interviewed by Tattum (1982), claimed that they were picked on at school and whilst they were not passive victims they did argue that inconsistency of rule application breeds a sense of grievance and precipitates confrontations. Rules operate where role fails and disruptive pupils have invariably rejected the pupil role as defined by teachers, and so regulation by rule is the main control mechanism employed in their case.

Schools are rule-governed organisations, and it is conceivable that every act a pupil performs is covered by some rule or other. If no specific rule exists then teachers' discretion permits them to create one to cover the case. An individual teacher's inconsistencies occur when he reacts differently towards different pupils for the same misbehaviours. Teachers should be seen to be fair,
neither having favourites nor picking on individuals, but there is evidence that preferential treatment is given to certain pupils, because of their social class or academic status (Lufler, 1979; Hollingsworth et al., 1984).

There is little doubt that not all pupils are treated the same by teachers for the simple reason that it is common practice to reward those pupils who conform to the ideal pupil role as a teacher perceives it, and punish those who deviate from perceived expectations. Differential treatment based on reputation or organisational labelling is well recorded (Hargreaves, 1967; Lacey, 1970).

According to Hastings and Schwieso (1987) it appears that pupils themselves,

... desire the teacher to take responsibility for the maintenance of order in the classroom and not involve either parent or other teachers. They want clear rules designed in conjunction with pupils and based on a number of reasons including the needs of the pupils and the teacher. The use of sanctions should occur after a warning, should involve only the miscreant and should be applied in a calm manner, minimising embarrassment to the miscreant. The sanctions used should focus on isolating pupils who misbehave and should not include arbitrary or harsh punishments. They should be applied consistently. Finally good teachers should recognise appropriate behaviour both by individuals and by the class. (p.27)

Tattum (1986) suggests that inconsistencies among teachers in respect of the enforcement of school
rules, are most evident as they move about the school building. Many teachers who concentrate on maintaining a firm discipline in their own classrooms nevertheless hold to the view that about-school discipline is the responsibility of the headteacher and other senior colleagues. Unfortunately, this differential response to good order results in differential treatment for the same offence and disruptive responses may be generated.

The literature providing a pupil perspective on disruption in the classroom confirms yet again the recurring theme that disruptive behaviour can most meaningfully be comprehended by considering the structure of the school day and the role and performance of teachers. Herbert (1978) has summarised the situation succinctly. He has suggested that there are two therapeutic objectives in working with children. These are (i) to enhance a child's response to the controlling factors in his environment without drastically altering the latter, and (ii) to change the controlling factors in an unsatisfactory learning environment as a means of modifying problem behaviour.

It would seem that the views of pupils on the causes of disruptive behaviour confirm other research studies in claiming that much could be gained by changing the controlling factors in an
unsatisfactory learning environment as a means of modifying problems.

Certainly those pupils who have experienced the process of being labelled as disruptive and of being referred to an off-site special unit are clear in their view that individual teachers and the way in which those teachers translate and apply the rules of the school, may goad pupils into disruptive behaviour.

Thus, again there is support in the available literature for the thesis that the causes of disruptive behaviour may more likely be explained in terms of facets of particular schools than in terms of constitutional problems within the pupils themselves.

Certainly, as indicated earlier, inconsistency of rule application on the part of the teacher gives rise to a sense of grievance and may precipitate a disruptive response on the part of the pupil. This is so when ever the pupil perceives that the teacher behaves unfairly. Such injustice may be seen in terms of preferential treatment being given to pupils from certain home backgrounds or social class origins. Of course, the reverse also applies in that some pupils may feel that they are treated unfairly precisely because they come from particular social class or ethnic backgrounds. In such circumstances, it may be that teachers seek the
explanation of a pupil's disruptive behaviour precisely in terms of social class or ethnic background.

The reality of the point warrants further discussion.
15. **The Relevance of Social Class and Ethnic Background**

Whilst the introductory sections of the literature review established the viewpoint that teachers see the causes of disruptive behaviour either in terms of 'within pupil' explanations or in terms of home and environment influences, subsequent sections of the review have cast considerable doubt on the 'within pupil' explanations. This section goes further to also cast doubt on the suggestion that the environmental influences of social class and ethnic background may be responsible for pupil disruptive behaviour. The literature confirms that although pupils from some social classes and some ethnic groups appear prominently in off-site special units, this does not imply that these background influences are causative factors in the creation of disruptive behaviour.

An illuminating programme of interviewing is reported by Coulby and Harper (1985) and gives insight into the different way in which unit teachers and mainstream school teachers conceptualise behaviour problems. Detailed questioning showed that unit teachers tended to look first for within-child factors such as learning ability, social learning behavioural characteristics, etc. Since such sources of behaviour problems may be improved by providing a learning environment appropriate to the pupil's
needs, the responsibility for change presumably rests clearly with the teacher and the pupil. The mainstream school teachers, on the other hand, tended to look first at home factors, lack of parental care, changes of address, unstable home life and upsetting childhood. In such circumstances, responsibility for change is shifted away from the school and the teacher.

There is little doubt that teachers often tend to assume that home factors actually determine classroom behaviour. When they are having difficulty with a child, they will point to the fact that he or she has a poor home, that the father drinks, that the parents have split up. Judgements, often social class based, about the child's home circumstances are thus used as explanations of classroom behaviour without any recognised need to examine the more immediate and obvious, but potentially more threatening, classroom context (Coubly and Harper, 1985).

Concern about such thinking no doubt led Mary Warnock (1985) to conclude that, "The teacher is not obliged to think of the child as formed by his family, or his income bracket, but simply as himself, capable of learning that, with effort, he could do better." (p.11).
This comment extends beyond the question of home circumstances to that of social class. Galloway and Goodwin (1987), suggest that while it would be an over-statement to say that children from middle-class and professional homes are never placed in special units, it is certainly true that this happens very seldom indeed.

A not untypical picture emerged from a study by Ford et al. (1982). Ford suggests that

> The most striking feature about the social class distribution within the four schools was its absence. There was, effectively, little or no distribution in the sense that the overwhelming majority of the pupils came from the categories IV and V ... (p.136).

In practice, Ford et al. are referring to special schools rather than special units but few would doubt that the basic premise holds goods for the population of off-site units.

This is worth pursuing a step further because there is evidence to suggest that it is precisely the pupils of low social class backgrounds who are likely to be most influenced, for better or worse by the school (Dyer, 1968). The point is reiterated by Grosin (1985) in a review of American and Swedish studies. He argues that

> ... the space for improvement of the pedagogical and social climates should be greatest in schools which recruit children from socially and economically less fortunate families. In a similar way the schools in high status areas are
even now characterised to a greater degree by pedagogical and social climates which are favourable to pupils' results and social adjustment. Improvement of the climate in schools should in other words mean that the gap between different social groups within a generation would be narrowed. (p. 14).

The important point is the suggestion that those most influenced by the process of schooling are the least privileged and most vulnerably pupils in the school and that it is these pupils whose teachers are most likely to regard as having special educational needs because of their poor progress or behaviour.

Holman and Goghill (1987) argue that teachers often fail to recognise the point and when they do, they tend to assume that home and environmental problems are issues for other agencies and not themselves.

A series of studies reported by Lane (1974, 1976, 1978, 1983a, 1983b) confirm the idea that disproportional attention is given to pupils of deprived home circumstances. In Lane's studies it is shown that the level of deprivation faced by a child, correlates with a high level of initial difficulty in school. It was, however, the long term continuation of such deprivation which related to behaviour problems and Lane recognises a complex interaction of individual, school and familial factors. It may well be that deprived home
circumstances are less obviously a causation of behaviour problems and represent rather a condition where adequate compensation for difficulties elsewhere are lacking.

Knivetón (1987) has similarly assessed the relationship between social background and misbehaviour in school. Knivetón tested 44 boys between the ages of six years and 7½ years and found that working class boys initiated the misbehaving model significantly more than middle class boys. This does not, however, necessarily confirm that the home circumstances are the causation of the misbehaviour but rather that the home background is less able to provide a model against which the onset of the behaviour type may be resisted. In any case, Knivetón describes the misbehaviours as being of the type which could be expected of a boy being naughty during unsupervised play.

The issue has been pursued by a number of researchers. Galloway et al. (1985) are quite emphatic that socio-economic variables in the catchment area of a school are not associated with the level of disruptive behaviour displayed within the school. Grunsell (1979) reached a similar conclusion in his study of suspension from school.
It is, of course, always possible that rates of suspension and referral to off-site units from any particular school may reflect more the tolerance level of a particular head teacher than the overall level of disruptive behaviour in the school. In such circumstances it is hazardous to attempt to draw conclusions from a statistical relationship between suspensions on the one hand and the socio-economic nature of the catchment area.

It is noteworthy that Rutter et al. (1979) found a very low correlation between behaviour within the school and the pupils' social and educational characteristics on admission. Reynolds (1979a) reached similar conclusions from his studies in South Wales.

Taken together, the implication of these results is that the level of disruptive behaviour in a school bears little relationship to the social background of the pupils who comprise the catchment area. Galloway (1987) describes it as a blind alley to seek explanations in familial or social circumstances. This claim is not invalidated by clear evidence that most of the disruptive students in some schools live in a particularly disadvantaged part of the school's catchment areas. The evidence shows that pupils from similar areas
attending other schools are not regarded as disruptive (Galloway, 1987).

Whilst research may be able to pour some oil on the troubled water of social class in relation to disruptive behaviour, it is less possible to answer off the questions that surround pupils from ethnic minorities.

Francis (1979) has stressed that there is concern among local community organisations that a disproportionately large number of students from ethnic minorities have been sent to units, a point reiterated by Garner (1981). Certainly in the forefront of the sin bins controversy has been the fear of black parents that the units could be turned into dumping grounds, mirroring the ESN school battle of the 1960s.

Tomlinson (1982) has suggested that West Indian children are more likely to be placed in units for disruptive pupils than are pupils of other ethnic origins, although hard evidence is lacking. In Sheffield, however, children from ethnic minorities were not over-represented in a sample of children suspended from school (Galloway, 1982), nor in special groups for problem children in ordinary schools (Galloway, et al. 1982).
Baylis (1981) has reported the ILEA's response to this matter in so far as they instigated a survey of the ethnic origins of children in units. The ensuing report of the ILEA, RS 784/81 (1981a) indicated that there was indeed a disproportionate number of pupils of West India and Africa origin in the units. On the basis of the distribution of these ethnic minorities in the adolescent population of Inner London, it could be expected that the number of West Indian Children in units would be 102 although in fact there were 177. It should be said, however, that this is probably less significantly excessive than some commentators had earlier suggested.

Even so, the Ethnic Minorities Section of the ILEA has, as a direct result, suggested that consideration be given to setting in motion the machinery for phasing out all off-site units for disruptive pupils (ILEA 1986a). In practice, the matter was deferred for later consideration at the request of the Education Officer (ACE 1986a), and off-site units have been retained, with additional safeguards for pupils from Ethnic minorities (ILEA S7035 1987).

Whilst there may then be a relationship between social class background and/or ethnic origin on the one hand and removal from mainstream schooling
to an off-site special unit on the other, the same evidence does not confirm that a relationship exists between social class or ethnic grouping and disruptive behaviour. An important distinction exists between the two issues and political sensitivity may restrain the level of research required to clarify the matter.

Taking together the studies discussed above we may conclude with Galloway (1987) and Steed, Lawrence and Young (1986) that to seek an explanation of disruptive behaviour in the individual home and background factors of the pupil is to be guiled by a red-herring. Rather we must search in the institutional context for specific incidents of disruption.

It is too easy to deflect responsibility from the school and from specific aspects of particular schools by attempting to explain disruptive behaviour in terms of social class or ethnic background. The consensus view of those who have pursued the matter, is quite emphatically that socio-economic variables in the catchment area of the school are not associated with levels of disruption within the school itself.

This does not alter the fact that pupils from certain ethnic backgrounds and pupils from the
lower socio-economic groups do seem to appear in off-site special units, out of proportion to their numbers in the school population.

It would be relevant to seek information regarding the nature of life for these pupils and their peers in off-site units.
16. Life for the Pupil in the Off-Site Special Unit

Literature relating to life for pupils in off-site special units is pursued in this section to show that many pupils are happier and less disaffected in special units than they were in mainstream schools. The implications are that circumstances in the unit are less conducive to out bursts of disruptive behaviour than they are in mainstream schools and lends support to the view that schools must bear a heavy responsibility for the levels of disruptive behaviour experienced within them.

It is frequently maintained by teachers in schools that the school careers of disruptive pupils have invariably involved an unwillingness to accept the constraints of classroom organisation and some degree of pre-occupation with self-interest to the exclusion of any regard for the other persons needs and rights. If, in such circumstances, these pupils are to make a successful return to mainstream schools, then a major part of a unit's function must be to re-socialise them into school accepted patterns of social interaction. This includes the capacity to listen to other people, to wait one's turn and to share, to be able to see and respect another's point of view and the capacity to accept responsibility for one's own part in sequential active-interaction.
Jones (1977) has argued that in response to this process, pupils in special units go through three stages. In the first instance a close and working relationship is established between adult and child, but the majority of pupils in units have learnt that adults cannot be trusted. The trust offered by the teacher is accepted at first but the child's experiences have taught him to be suspicious and he is mistrustful of the motivation.

Hence a protracted testing out period will begin in which the child will attempt to exploit the adults blindspots, and test out the adults avowed care, concern and affection. As Breese (1983) says, the child is asking if the teacher can love him unconditionally as he might be so loved by his parents, or is it only the good parts of him that attract?

The second stage of sustaining the relationship, says Breese, requires considerable stamina, determination, resourcefulness and patience. Jones and Davies (1975) have described this second stage as,

A period of intense communication on a verbal level between child and unit staff where children began to look at their difficulties and the reality of their home circumstances and to react emotionally. (p. 49)

Jones and Davies (1975) see this as a time when the child's behaviour is likely to deteriorate, a time
The children did the talking and the teachers the listening, sometimes for hours and weeks. It was a time when the teacher's endurance and patience were tested to the full... when pretend games were at an end - pretending they were happy and loved by their parents - a time to cry, to be desolate, to go away to a corner and be quietly alone, to feel safe enough to do all these things. (p. 49).

The implication of this account of a Special Adjustment Unit is that some problems do lie in the home and that children initially deny reality and have to come to terms with it finally. During this process they will test out the trust of the adults around them and will show a great deal of emotion. They will also need to talk and need ready listeners.

Breese (1983) makes the point that perhaps not all children in such units do deny the reality of their home situations. A point reinforced by Leach et al. (1986) who demonstrate the spillover effects of a home-based reinforcement programme for disruptive pupils in a secondary school. Yet, because of the inconsistencies they have faced and the injustices they feel they have encountered, they may still want to test out the new adults, i.e. the staff of the unit. The pupils may not always go through stage two described by Jones (1977) if they are usefully and purposefully occupied in the unit. Hence the
curriculum is important in the unit if the pupil is to progress to the third stage, which is one marked by the experience of a sense of success and achievement upon which an acceptance of 'normal' school norms can be based. On the whole units succeed to this end by producing a more relevant curriculum than the mainstream school. White (1980) has shown that pupils respond favourably to this and quotes pupils' comments like, "We were treated more like adults ... here you talked much more about what everyone wanted to do." (p. 166).

Of course, this sets up a comparison with the normal school, and as Grunsell (1980b) has said, "Having taught them to expect more from adults in terms of care and affection, we had made the impersonal atmosphere of ordinary school seem that much worse." (p. 66). In general, as a number of authors note, e.g. (Wilson and Evans, 1980), the centres and units are more open, more personal, more understanding of needs and feelings and of difficult behaviour than are at least some normal schools.

Breese maintains that pupils in centres may be best suited by very straightforward simple work that enables them to achieve something even if it is only a fairly neat page of copying.
White (1980) in his description of the Bayswater Centre in Bristol, holds that special units such as his do at least provide a framework for experimentation within the system. With their relative financial security, they can concentrate on developing curriculum and structures appropriate to the individuals with whom they work, unfettered by distracting anxieties about their mere survival. Unfortunately, as Tattum (1982) says, many of the methods employed in off-site units are not easily transferable to schools because they are dependent upon the physical size of units and the small number of teachers and pupils in attendance.

To illustrate the point, Ling (1987) describes a situation in one particular special unit where the staff engage in physical encounters with the pupils known as 'joshing' and 'murder ball'. The onset of this latter 'game' is often triggered-off by instances of boisterous behaviour during the lunch break and provides not only an opportunity for old scores to be settled, but also for staff to demonstrate superiority.

The head of the unit in question claims that the cause of a substantial amount of disruptive behaviour is due to the size and impersonal nature of many schools.
The head of the unit goes on to draw out the fundamental difference between day to day education in the unit compared to the mainstream school curriculum. He defines a pupil at the unit as one who cannot cope with the fact that some teachers are pretty hopeless and insists that no attempt is made to persuade the pupil that his perception of the experience of school is in need of readjustment, only his behaviour.

Bereiter (1977) has suggested that for pupils with learning difficulties, the concentration should be on learning rather than thinking.

It may sound as if Bereiter is advocating simply rote learning, but for children in units, with below average reading age, etc., perhaps we should not place too many demands on their powers of understanding. Marland (1975) reminds us that "vigorous teaching of the skills will often lead on to motivation." (p.9).

Among other successful features of units, White (1980) mentions the importance of work experience for older pupils, of camping, especially when the young people themselves do the preliminary work of selecting sites, writing letters, preparing menus, estimating costs and are given opportunities for openness and trust.
It is interesting in this context that Ling (1987) notes that many male teachers in off-site units have sporting interests and a significant number are former Physical Education teachers.

Grunsell (1980b) takes up another point, also referred to by White, i.e. the real wish of the staff that pupils do attend. As he says, "A day missed and we were round to their homes." (p.59).

Many a truant in ordinary schools must feel that he is doing the staff a service by staying away. The longer he is away, the harder it is to return. His return is noticed by staff and fellow pupils and this in itself can be an embarrassment. For the pupil in the unit, being told immediately he is away that he has been missed and is wanted back for his own sake as a member of the community can show him he is wanted as a person in his own right. Littler (1982a) has shown how pupils in mainstream schools, by comparison, complain of punishment on return from being absent.

It is a feature of units that staff go out of their way to help pupils, i.e. to make them feel wanted and are seen as spending time informally with pupils who feel able to go to them with personal problems (Wilson and Evans, 1980).
Many teachers in units, therefore, see their task as restoring the joys of success as a pre-requisite to a reduction in frustration and pronounced boredom, they thus emphasise back to basics as therapy and rehabilitation (Tattum 1982).

Many pupils claim quite categorically that they are happier and less disaffected in special units (Mortimore, et al. 1983). The point is confirmed by Tattum (1986) who found pupils attending off-site centres to be favourably disposed towards them. This was evident from their responses to a series of questions about their referral, their academic work and other activities at the centres, their likes and dislikes and the benefits to be obtained from attending centres. The point is confirmed by the present writer.

Over half of the pupils in Tattum's study said that their initial reactions to referral were positive. Several pupils, for example, mentioned the favourable impression of the centre they had gained from their initial visit. Approximately 25 per cent of those whose initial reactions were positive, made specific comments suggesting that they saw their referral to the unit as providing a change for the better from school.
Nearly 50 per cent of the pupils went further to say that they enjoyed the academic work they were doing in the units. Some of these even made favourable comments about the pleasant atmosphere and the good relationships that existed between staff and pupils.

Against this, 5 per cent of pupils indicated a negative reaction to their referral to the unit. The reasons they gave were that they were concerned about being separated from school friends and were wary of the reputation of the unit. Very few, however, commented adversely on life at the centres. Most pupils clearly saw benefits, both academic benefits and personal benefits, which could assist them to cope better on returning to mainstream schooling. Indeed only 7 per cent of the pupils interviewed by Tattum felt that they had not gained anything from their time in the centre. The low absentee rate for pupils attending the centre may or may not confirm a low level of disaffection.

Several points of considerable significance arise from the literature reviewed on life for the pupil in the off-site special unit.

It has been stated previously that much can be learned from a consideration of the pupil's perspective of the school. This is especially
true of the off-site special unit and the positive comments made by pupils may carry important messages for off-site units and mainstream schools alike. The pupils avowed need for the chance to experience success, to feel wanted and to be followed-up if absent without reason, seem reasonable enough. Yet for some pupils these requirements have been absent in the pupils main school history and yet found in the off-site special unit.

It would appear that the off-site special unit does have reasons and benefit for some pupils.

As the Head of Unit reported by Ling (1987) put it, a pupil does not come to a special off-site unit to undergo an enforced change in his or her perception of the school. It may be that his or her perception that some members of staff at the school are inadequate, is a reasonable and correct perception. Rather pupils come to the unit because they cannot cope with the inadequacies of the school and still continue to learn, progress and know some success and achievement. The reasons for failure to cope with the schools' inadequacies may be personal, familial, ethnic or educational. Whatever the reason, the fact remains, that according to this view, the inadequacies reside in the school and not in the pupil.
The evidence provided by the literature would suggest that the caring and personal approach of the staff in the units provide an opportunity for the pupil-satisfaction that is derived from academic success to be restored.

There is clearly much of importance for the school contained in this message. Since, however, the 'beneficial' conditions experienced within the units are certainly not all directly transferrable to mainstream schools, the contrasts created between units and schools, work strongly against the successful reintegration of referred pupils. It has to be concluded, however, that this is no fault of the pupils.
17. The Perceived Advantages and Disadvantages of Off-Site Special Units

The earlier preceding sections of the literature review have shown that schools and local education authorities generally explain disruptive behaviour in terms of individual or environmental pathologies. It follows that off-site special units have been viewed as performing a role that is supportive of the mainstream school whilst at the same time providing a corrective programme for the pupils. Whilst the available literature has proceeded to cast doubt on the above explanation of disruptive behaviour, there is little evidence to suggest that attitudes towards off-site special units have changed accordingly. So long as units continue to be seen as firstly punitive and only secondly as therapeutic, then criticisms of units will probably continue to outweigh claims supporting their advantages. This does not alter the fact that much can be learned from the units and the idea that units may provide a useful education resource, must not be ruled out, at least until such time as a satisfactory criterion for evaluating them has been devised and employed.

With this in mind the advantages and disadvantages of off-site special units may be pursued in summary through the literature inorder to show that despite the avowed problems associated with the unit business, some pupils may benefit from the cited
advantages.

An important disadvantage of units is that their long term effectiveness has not yet been proven. A more radical objection voiced by some local education authorities is that the notion of an off-site special unit runs counter to the accepted policy which states that wherever possible, children should be educated in ordinary schools.

This presupposes, of course, that ordinary schools are desirable places in which all pupils, including those who are disaffected and disruptive, are able to receive a satisfactory education.

The suitability of some schools for these pupils has already been questioned but Alhadeff et al. (1982) remind us, that having somewhere to send their disruptives can prevent schools from attending to the issues that surround the integration of problem children into mainstream schooling.

The argument that by creating special provision, it is too easy to deflect attention from the real problem can also be said to apply within ordinary schools (Best, et al. 1977), (Docking, 1980), (Murgatroyd, 1980), i.e. in respect of pastoral care systems and counselling. The special unit, is, therefore, not alone in this respect.
There is the point, however, that within special units, social learning from other pupils is clearly limited, since the units, by their very nature, lose their best pupils only to have them replaced by new disruptive pupils, which is one good reason why it is undesirable to have too large a turnover at any one time.

Daines (1981) suggests that there is a conceptual inadequacy in units in that pupils admitted to units tend to be deemed to be pupils who are disruptive in class due to emotional or social reasons, pupils who are introverted, pupils who have emotional problems, school phobias, etc., and rarely is there reference to situational factors. This would seem to be more a criticism of educationalists beliefs about off-site units than about the units themselves. Even so, there is a danger that this level of thinking leads to an acceptance of units as receptacles for the problems produced by institutions.

West, Davies and Varlaam (1986) surveyed the headteachers of inner London schools and found their attitudes towards off-site units to be more varied than the above view implies. Most headteachers thought centres had been of benefit
at least to some of the pupils who had attended them. There were, however, several headteachers who were critical of the effects of the centre. Many heads felt that the units had little or no effect on the pupils. Some criticised the curriculum taught in the unit whilst others deemed the unit to be a 'soft option' and saw in the units little more than an opportunity to avoid facing the problems encountered in an ordinary classroom.

Others have similarly written critically about off-site units. Rabinowitz (1981a) is sceptical about the value of special units and he upholds the virtues of the alternative provision of the tutorial class on the grounds that links are kept with the parent school. The same point is supported by Whitcomb (1983) whilst Vaughan (1983) further suggests that pupils dispatched to off-site units are sufficiently separated from the school of origin that referral is analogous to 'seeing out time'.

The very concept of off-site provision obviously creates some level of separation from the school. The fundamental question must be whether this is a desirable separation or an undesirable chasm.

Alhadeff et al. (1982) err to the latter when they
maintain that the way money and resources are provided for special units can be a lottery, particularly over staff and buildings. They indicate that the isolation of staff in small units is a worry and in-service training for those working in such institutions has not really been adequately provided for anywhere in the country. Topping (1983) found that staff in special units set up to support children are left with inadequate support themselves.

West, Davies and Varlaam (1986) report that only one fifth of staff in special centres, including off-site centres, considered that the provision for in-service training was adequate. Of the remaining four fifths, many felt that there were no training courses which directly related to teaching in special units and support centres. Others made the point that the low staffing levels did not make it possible for individual teachers to have leave for in-service training.

There is the further point, argued by Booth (1987), that a training in special education which concentrates on those who fail to adapt to mainstream curriculum or are excluded from mainstream schools, inevitably helps to perpetuate existing casualty rates.
The danger is that if money is expended to remedy staff training deficiencies in off-site units, the whole 'unit business' could be petrified and made self-protective with units becoming established as alternatives to normal education.

Jones (1983) argues that an important aspect of the problems that surround special off-site units is the extent to which units and mainstream schools operate parallel systems which in turn create divisions. The appointments procedures and accountability at advisory level, both operate along different paths in units and mainstream schools. Still more significantly, the concept of parallelism fosters the view that ordinary schools ought not to expect to cope with a minority of their pupils (Tomlinson, 1982).

There would then be a real cause for fear that a pupil's stay in a unit might become a permanent or semi-permanent form of education conducted in an environment that is inappropriately organised for the purpose in hand.

A report by the School's Council (Evans 1981) was, as stated previously, emphatic in recommending that schools should not regard disruptive pupils as a breed apart. The report's objection to special units is that they deny pupils access to a full
range of educational opportunities and show schools are willing to regard some pupils as second-rate and following a second-rate programme.

Other writers have raised yet further issues. Whitty (1981) has described special off-site units as critically lacking in a number of respects. Coulby and Harper (1985) go further to suggest that the fact that these units are not recognised special schools may be administratively convenient, but, except in the general inferiority of their facilities, they are in no way intrinsically different from other special schools. On the one hand this means that many of the criticisms which have been levelled against special schools could equally be made against many off-site units. On the other hand, it means that recent policies for integrating designated handicapped children into mainstream schools (the 1981 Education Act and succeeding Circular 1/83) should apply equally to those in the less official category of disruptive pupils.

A number of other commentators have criticised the concept and workings of units for disruptive pupils. Francis (1980a) articulates the view of many by making reference to an HMI who remarked on the lack of a clear definition of what disruptive behaviour is and questioned whether there had in
fact been any real increase in the scale of the problem. The HMI is reported to have continued with the comment that,

The worrying impetus given by special units to the generation of yet more demand for their services and the related fact that their existence often seems to have the effect of absolving schools from the responsibility of examining the relevance and value of what they offer to all their pupils, gives rise to concern. (p. 13).

Francis (1980b) makes the point that by setting up units for disruptive pupils we have created a new category of child and that this new category of child creates its own demand. He suggests that children will be found to fit it, new specialists will be found to become expert in it and the classroom teachers will be able to shrug their shoulders and let someone else deal with the problem. He goes on to summarise the causes for concern in the following terms. When students are referred to units there is rarely any formal consultation with parents; reasons for referral may vary and are rarely clearly stated; children once labelled as disruptive seldom return to mainstream schools; students may be offered only a limited curriculum and in some cases only part time education, hence being obliged to miss examination courses; the legality of some units is questionable and where they have management committees it is unusual for parents or community representatives to
be included; in many units 'behaviour modification' techniques are employed and the emphasis is on treatment rather than education; units may be used as a first resort by schools in difficulty when in fact, extra resources, a reappraisal of the curriculum and a more responsive and flexible structure might be appropriate.

Some broadly similar issues had arisen from a large scale study in Florida, U.S.A. (Alachua County Schools, 1975). Here, off-site units were distinguished by their artificial and unnatural setting; there were transport problems; the units tended to be used as dumping grounds labelling resulted in permanent endorsement of children's records; reintegration was difficult; liaison with ordinary schools was difficult; there were no normal peer models and the children tended to model themselves on each others disruptive behaviour.

This last point was confirmed as an aspect of pupil behaviour in units in this country in a Report of Liverpool Education Committee (1974). The development of 'a culture of baddies,' as Francis (1980b) has put it.

A later ILEA Evaluation (ILEA 1983a) recognises the likely institutional effect of a system which
seems to influence behaviour irrespective of sex, tutor or length of stay.

The report concludes that, "More work is needed in considering the effect of institutions on the individuals within them and the best ways of modifying these institutional factors if this is desirable or necessary". (p. 56).

Some comments on special off-site units point to their advantages but remain negative. For example, support for special units has come from the general secretary of the Professional Association of Teachers (Dawson, 1981) who realistically states that 25 children in a class should not be denied their chance to learn because of the presence of a 'couple of wreckers'. Understandably, some children can stop a class in its tracks and a case can, therefore, be made for their removal, (Brooks 1981).

Schools have certainly found that withdrawing a small number of pupils can make life pleasanter and more productive for the majority of staff and pupils. It is perhaps not too surprising, therefore, that Local Education Authorities commonly use what Young, Lawrence and Steed (1979) describe as a 'double definition' of disruption, identifying it as at the same
time a group of behaviours which it will try to contain and correct by broad in-school and out-of-school measures, and a pupil phenomenon which it will try to treat by placement in a special unit or centre.

This can impose expectations upon off-site special units that are most difficult, if not impossible to achieve, especially if resources are limited and the curriculum restricted.

Disquiet has been voiced about the restricted curriculum in the units by a number of writers. The DES (1978) drew attention to the fact that whilst English and Mathematics were taught in nearly all the units they visited, Humanities and Science figured less prominently, with Languages, Religious Education and Music being taught in a very small minority of units. Perhaps more surprisingly, practical subjects like Home Economics and Art were taught in only one half of the units with only a fifth of units offering Physical Education or Games, and only one in ten teaching Woodwork. The same report went on to conclude that some units lacked specialist resources, particularly text books, reference material and works of fiction. Against this background, the unit staff's own perceptions of their function is revealing since 16% claimed to concentrate mainly on remedial work, 54%
on social training, and the remaining 30% on both.

Similarly, Dawson (1980) found that units tended to teach fewer subjects than special schools, with only English, Mathematics and Art being widely taught. The reason for this has been pointed up by the DES (1980) who state that the curriculum available in the units provided by the Inner London Education Authority are inevitably limited by accommodation and staff expertise; there is a shortage of skilled teachers in some subjects and an apparent lack of curriculum liaison in some instances.

Mortimore, et al. (1983) explains the inferior curriculum of off-site units by arguing that the small staffs cannot always cover the range of subjects available in a large primary or secondary school. It is also a further consequence of setting the units up on the cheap. Premises are often of poor quality, equipment scarce, and there are rarely such facilities as science laboratories or craft rooms. The present writer visited one off-site unit established in a church hall and obliged to vacate the premises when a funeral took place.

Coulby and Harper (1985) confirm the point that
in special units, the curriculum is normally a restricted and down-graded version of that available in mainstream schools. The most severe effect of this on segregated pupils is that they do not receive as adequate an education as children in mainstream schools. Coulby and Harper do not suggest that pupils in off-site units lack concern, personal guidance and excellent attention to their needs as human beings: only that they are not allowed to learn as much about as wide a range of subjects as mainstream pupils. At worst, they can be exposed to the remedial subjects, plus a table tennis curriculum, spending much of the day on repetitive, pedestrian exercises. The further effect of these curriculum restrictions is that they are only likely to take a small number of public examinations, if any. It may be argued that, even without segregation, these pupils were hardly likely to gather the glittering prizes of the education system. This does not, however, constitute grounds for their having their opportunities institutionally restricted. A recommendation that a pupil spend the last few years of compulsory schooling in a unit may be a sentence to leave school with inferior qualifications.

The notion of an effective curriculum for students to follow in units for disruptive pupils poses a
further and related problem. Youngman (1979), for example, is certainly not alone in recognising that the normal school environment has little in common with the pattern of experience that many pupil's encounter in the world outside. Again, Evans (1981) makes the point that schools as a whole cannot bring themselves officially to acknowledge that some pupils feel that what is on offer is alien and irrelevant. There would seem, therefore to be a case for providing a curriculum in both schools and units which accommodate disruptive pupils that bears in mind a causal relationship between disaffection and disruption. The problem is, however, that in seeking to provide a climate in which the disruptive pupil can cope, it may be that the true aims of the education system are being diluted within special units. Littler (1982a) draws attention to the pupil within a unit whose displayed work of an inventive and thought provoking advertisement designed to stop people smoking, employed the caption, "Do you want your lover smelling of fags." (p. 27). Littler makes the comment that although the pupil in question may well be coping better with the world in which he finds himself, it is less clear that he is any better prepared for the wider society of which he is shortly to become a member. Ling (1982) has put it this way,

However committed, skilful, innovative are the staff in disruptive units, they are always
constrained by the norms and values of the wider world. It is to this world view or culture that they must remain sensitive even as they attempt to define what it is that constitutes success, and, therefore, failure in their work. (p. 19)

Views on what the unit business is all about tend, therefore, to regress to the idea that they are primarily institutions of confinement for pupils rather than for their educational development.

Tattum (1982) asks, "How can we escape the fact that we are creating institutions within education whose primary function is punitive and confinement and only secondly educative or therapeutic." (p. 50).

Morse et al. (1964) had earlier made a similar point in their research analysis of units throughout the United States. Jesinkey and Stern (1974) similarly referring to the situation in the United States, suggest that while the units may exercise control, there are serious questions about the children's internalisation of that control. Even the custodial function of units, therefore, comes under attack.

The DES (1978) Report on Behavioural Units makes the point that the return of a pupil to normal schooling from full-time attendance at a unit was minimal or non-existent. The same report admits that the percentage of pupils who returned to school was difficult to calculate, but nevertheless recognised that units catering for the secondary age
range often had a preponderence of disaffected 14-16 year old pupils who were unlikely to return to school. The Liverpool Education Committee (1974) has previously offered one explanation for this by noting that it was easy for secondary schools to see their responsibilities to a child ending with his departure to an off-site unit.

Because of these particular emphases in units, Grunsell (1980a) felt he was returning pupils to ordinary schools where they had no power to choose and where their opinions carried no weight or value.

Ling (1982) goes further to suggest that because the unit is attempting to do something 'special' with its pupils, this in itself may prove confusing to the pupil when he or she is returning to mainstream school. This difficulty of reintegrating into normal schooling is also pointed out by Beresford and Croft (1981). They show how after receiving education in a centre, with its 'contracts' and recognition of pupils' rights, the pupils will not tolerate being treated as objects or put down by teachers or the school system, so they will not go back. They conclude by saying that there is no reason why the advantages the centre's education offered could not be achieved and incorporated in ordinary schools. The point would seem to be reinforced by Watts (1983) who confirms that not only do most pupils who leave
Bristol Special Units do so directly to enter employment but that they do so successfully and that majority of girls go on to work with children in situations where controlled behaviour is necessary, and some 90% of boys join the armed forces where discipline is strict.

The conclusion would seem to be that whilst the form of education pupils receive in an off-site special unit may not easily support their reintegration back into the mainstream school of origin, it does prepare them for a successful post-school life. Even so, as a result of the criticisms of off-site units, Basini (1981), in a study of six ILEA off-site centres, came down more in favour of counsellors, smaller classes and, maybe, smaller schools, rather than the system whereby troublesome pupils are removed from ordinary schools. It is perhaps interesting that Whitaker (1985), who was himself an experienced head of an LEA off-site special unit, concludes his own research by recommending a range of alternative strategies and responses to the problem of disruptive behaviour.

Docking (1980), writing on control and discipline in schools, acknowledges that pupils in centres do lose their anti-school feelings, but he sees the
danger that if centres continue to be used, schools will be less inclined to look at their own responsibility. Previous reference has already been made to the point. Lloyd-Smith (1979) goes further, however, by stating that where disruptive behaviour is an artifact of the school system or an expression or rejection by it or alienation from it, to simply externalize the problem will neither solve it nor make its recurrence any less likely.

This is a fair point but so too is Golby's (1979) in pointing out that units do offer the opportunity to test out experimental ideas, in both method and content and to see their promotion through to all pupils when they prove their worth.

For educationalists and research workers, the existence of the centre creates a unique opportunity to experiment with elements of regime and curriculum and explore the extent to which democracy and participation can be built into the programme (Leggett, 1979), (Ball and Ball, 1980), (Grunsell 1980), (White, 1980), (Beresford and Croft, 1982).

Whilst it would be wrong to justify the continuation of off-site special units solely on the grounds that their existence stimulates research, the point remains a significant one.
Certainly the majority of workers in long-term off-site provision would justify the existence of such centres by pointing to the potential benefits such as the creation of an environment in which children can be helped to achieve success after years of failure at school. The favourable staff/student ratios are also seen as enabling young people to benefit from the increased attention and to develop non-authoritarian relationships with adults (Lloyd-Smith, 1985).

An Inner London Education Authority report of a working party on off-site support centres referred to visits to off-site units where there was impressive evidence of good staff-student relationships and considerable achievement in improving attendance, attitudes and attainments in basis skills of a number of the pupils (ILEA Report 5042, 1985).

In short-term off-site centres, where pupil reintegration is regularly achieved, the educationalists and researchers usually see the centre as providing pupils with a chance to catch up on interrupted school work in a non-threatening environment, and to generally receive a second chance to finish their school careers (Dain, 1977), (Swailes, 1979), (Wright, 1980).
Smallness in the unit is also a significant factor in improving behaviour mainly because it reduces the organisational mechanics such as rules and regulations which larger organisations find it necessary to impose. Smallness can also reduce impersonalness and improve communications and provide greater teacher-pupil participation. Small settings also increase opportunities for involvement and offer more chance of being given responsibilities, for the problem of size in some Comprehensive Schools means that more of the students are less needed, and can become superfluous (Barker and Gump, 1964).

Against the background of the factors cited as advantages for off-site special units, some pupils may well find within them a retreat from mainstream school and its systems which they deemed inappropriate and unacceptable (Payne, 1980).

Even so, it would seem that the volume of literature that sets out the disadvantages of off-site special units out weighs that which extols the advantages.

Much of the literature that is critical of off-site units tends however to fail to recognise the part played by the school and its systems in the generation of disruptive behaviour. Hence in
pressing home the desirability of retaining all pupils in mainstream schools, the assumption is made that schools are always the best place for all pupils to be.

This has been questioned in previous sections of the literature review.

Whilst, therefore, there are undoubtedly inadequacies in many off-site units in respect of resources, staff training, curriculum choice, limited pupil contacts, etc., it may still be the case that for some pupils even this restricted environment is more conducive to their wellbeing and educational development than is the mainstream school.
18. **Concluding Comments on the Review of Literature**

Steed (1985), in considering the causes of disruptive behaviour, asks whether the pupil or the school is the disruptive influence. Steed poses the question, 'which is the chicken and which the egg?' In a later work (Steed, Lawrence and Young, 1986), Steed and his colleagues maintain that by monitoring incidents where disruption has occurred, we may well find useful clues to resolving the riddle.

A possible implication of this, as indicated by a number of works, is that whilst disruptive behaviour may result from a complex interrelationship of factors, the key to understanding the causes of disruption resides in the school system rather than in the pupil or his/her familial circumstances.

It is suggested that teachers seek scapegoats beyond their direct influence and thus distract from finding the real causes of disruption.

This is not to imply that teachers do so out of spite or malice, but rather that the context within which they work and the aims and objectives of mainstream schools in general, place teachers in a position where such action is required of them.

Hence pupils are referred to local education authority off-site special units in circumstances
where the precise motives are not always clear.

Disappointingly, little further clarification was provided by the 1981 Education Act. Indeed, Galloway and Goodwin, (1987) have a point when they say that those schools which have had the greatest success in educating their most problematic pupils are those which have acted outside of the minimum requirements of the Act. Thus, the aims and objectives of off-site special units for disruptive pupils have probably become less clear rather than more clear as time has passed.

The implications for evaluating the units are considerable. Some headteachers and others have expressed doubts about the value of off-site special units in producing long term changes in pupil behaviour, also claiming that return to mainstream schooling can be difficult and successful reintegration rarely possible. This is hardly surprising. Much of the literature reviewed suggests that the actions of headteachers and local education authorities assumes that off-site special units are primarily in business to provide schools with a place to which they can off-load their more difficult and disruptive pupils. In such circumstances it seems quite extraordinarily ambitious to suppose that the units may achieve long term changes in pupil behaviour to a point where
these pupils may be successfully reintegrated back into their mainstream schools of origin. If indeed off-site units are to be viewed as dumping grounds for pupils who are recalcitrant in the mainstream school system, then presumably the essential criterion by which the units may be evaluated is in terms of their ability to keep pupils contained within the units.

Local Education Authorities vigorously deny that the units are dumping grounds for pupils who are disaffected and unwanted by the schools.

Rather, it is argued, off-site special units should be seen as serving a remedial function. In this case it is more reasonable to seek changes in pupil behaviour and to look for long term successful reintegration. This, however, raises a number of issues. If off-site special units are viewed as serving a remedial function, it becomes necessary to ask whether they are remedying faults in a pupil's academic achievement or in a pupil's behaviour.

The literature reviewed suggests that the two points are not easily separated, a point which in itself tends to raise questions about the causes of disruptive behaviour and the reasons under-pinning a pupil's referral to an off-site special unit. If disaffection and disruption are indeed associated
with learning disability, as suggested in the literature, then we are entitled to ask why appropriate attention was not given to the problem in the mainstream school.

If, on the other hand, it is deemed to be a main function of off-site units to bring about change in pupil behaviour, then the clear assumption is that there is something wrong with the pupil that is best catered for in a special unit and that this is somehow in the best interests of the pupil. This presupposes that the causes of disruption are known and understood and that these causes reside most significantly within the pupil.

In the first place, this is to ignore the evidence which suggests that spontaneous remission will, with time, ensure the passing of disruptive behaviour and which, therefore, lends weight to the view that concern for the pupil would probably best be satisfied by retaining him or her in the mainstream system.

In the second place, it is to ignore the wealth of evidence which challenges the assumption that the causes of disruptive behaviour are necessarily rooted within the individual pupil.

There is over-whelming evidence to suggest that
schools do make a difference to a pupil's behaviour and that the practices some schools choose to adopt can make a substantial contribution to the level of disruptive behaviour displayed within the school. That this is so, irrespective of the catchment area, suggests that the pupil's class and ethnic background are not key issues causing disruptive behaviour.

Not only does the literature suggest that some schools are more likely than others to generate disruptive behaviour but many commentators go further to identify factors within these schools which may be held especially responsible. Inconsistency of rule application, irrelevance in the curriculum and the sense of failure generated in some pupils may well goad them to a disruptive response.

Certainly the pupils themselves are clear in their view about where the problems lie. They refer to inadequacies in some teachers, the extent to which trivial misdemeanors may be escalated, not being treated with respect, being picked on, and so on.

Whilst it is necessary to be wary when assessing consumer viewpoints, an analysis of that literature which reports on the pupils' views of disruptive behaviour, leaves the reader with a pervading sense
of believing that few disruptive pupils are in need of psychiatric attention or behaviour modification. They may indeed be in need of remedial attention for their backwardness in academic studies, but much of the behaviour displayed by pupils within the school could even be deemed to be rational, given the pressures placed upon them.

It may be rational but it is not acceptable and the pupil is referred, as a result, to an off-site unit for disruptive pupils. Given what has gone before, there is however a certain naivety in the assumption that the unit should produce a curative effect that permits permanent reintegration back into the school of origin.

Literature relating to life in special off-site units for these pupils confirms that they are less in need of learning the error of their ways than in need of experiencing a sense of success and achievement upon which they can build subsequent learning.

There is a real sense in which the approach of the unit, which tends to be more personal, more individualised and more caring than that of mainstream schools, offers the pupil an opportunity for pupil-satisfaction, derived from succeeding, and which can restore a willingness to conform to the
requirements of schools in respect of refraining from disruptive behaviour.

Even allowing for this last point, it is difficult to see how, in these circumstances, successful reintegration back into mainstream schooling could constitute a criteria for deeming that the unit has been successful. A return to the very circumstances which were largely responsible for the pupil's initial problems, is hardly likely to prove generally successful.

It may be that, as several writers suggest, the off-site special unit could be dispensed with so long as the merits for pupils found within the units can be incorporated into mainstream schools. It is not clear, however, that this is totally possible. It is more clear that the will to accept a change in the definition of pupil disruptive behaviour, which sees it as essentially pupil generated, is far from evident. Certainly, this would involve accepting fundamental criticisms of schools in general and of some schools in particular. Certainly, it would involve shifting the ground away from devolving all responsibility for pupil disruptive behaviour on the pupil to accepting that significant areas of responsibility must be assumed by the school and its staff.
Meanwhile, off-site special units are retained by many local education authorities. The Inner London Education Authority, having assessed its provision for off-site special units, has recommended that such units should remain, despite considerable opposition by those who have drawn attention to the lack of resources, curriculum choice and confusion about the concept of units. This is despite the fact that the U.K. is alone amongst European Countries in providing off-site special units for disruptive pupils.

Although schools in other European countries similarly experience problems arising from the behaviour of disruptive pupils, the United Kingdom is alone in responding by means of off-site special units. Lawrence, Steed and Young (1984b) have shown that schools in France, West Germany, Switzerland, Denmark and the United Kingdom all experience difficulties associated with disruptive pupils and there is close agreement about the particular behaviours concerned. Even so, none of the countries except the U.K. utilise special off-site units as a method of dealing with the problem.

This may be explained on historical grounds or simply that it remains expedient to local education authorities and to schools to remove to off-site units those pupils who do not neatly fit the system.
Certainly, disruptive pupils make excessive demands upon the resources of mainstream school.

This may be a point of some considerable significance since the literature suggests that schools are under pressure to maintain standards of academic achievement and behaviour and are judged accordingly. Indeed, it has even been hinted that the Department of Education and Science may in future assess schools by levels of disruption (Surkes, 1987). In such circumstances, it is most tempting to move disruptive pupils off-site, whatever the case for not doing so may be.

Lawrence, Steed and Young (1986) express concern that this particular tendency implies a penal model.

This is an important point which may well be significant in supporting the long term continuation of off-site special units.

If this is, however, the 'raison d'etre' of the special unit, than we must be honest about it and evaluate it accordingly.

As it stands, the literature shows that the decision to refer pupils to off-site special units almost certainly rests upon a failure by teachers, psychologists and Local Education Authority
administrators to fully accept the causes of disruptive behaviour. In any case, there is, at best, ambivalence in their stated reasons for referring disruptive pupils to units, for whilst primary concern for the referred pupil's ultimate progress and development is voiced, there is little doubt that the removal of disruptive pupils to off-site special units is justified on the grounds of this being in the best interests of the referring schools and their staff and pupils.

In these circumstances a clash may well exist between the best interests of the referred pupils and those of the referring schools.

To establish an acceptable criterion for the evaluation of Local Education Authority off-site special units requires, therefore, due recognition to be given to this clash and also to the messages transmitted by the available literature about the nature of the probable basis of disruptive behaviour.

The available literature gives support to the view that the comprehensive school system may not be supportive to the orderly development of some pupils and some features of schools may be positively conducive to a disruptive response from certain pupils.
To this extent disruptive behaviour may be explicable. To say that it is explicable is not, however, to suggest that it is acceptable.

It is not acceptable to schools because in the absence of major reorganisation in the comprehensive school system, the education of the majority of pupils and the reputation of the school are both impaired by the behaviour of a few disruptive pupils. Also, there is evidence in the literature to suggest that disruptive behaviour is associated with reduced academic performance by the pupils concerned and possible future delinquency.

It would seem to follow that whatever the ambiguities and confusions that surround the expectations placed upon off-site special units, a role for the units must incorporate the attempt to produce behaviour change in the pupils referred to them.

A significant criteria for the evaluation of off-site special units may therefore be their success, or failure, in respect of assisting pupils in units to achieve a level and type of behaviour that would be satisfactory to the referring schools and, by inference, to society in general.
It is immaterial to stress that this improved behaviour should be maintained in the long term after reintegration into mainstream schooling. If, as the literature suggests, the school may be a notable causative factor in producing the pupil's disruptive behaviour, then it would be unreasonable to suppose that improvements in behaviour achieved in a unit will necessarily be maintained when a pupil is returned to the source of the problem. Since, however, pupils in units frequently express a desire that they be permitted to return to mainstream schooling, then improved behaviour must rightly or wrongly, be a criterion by which their stay in the unit is evaluated, if their stated ambition is to be achieved.

By concentrating on behaviour change displayed by pupils in units as a criterion for evaluation, the units, it is not, of course, possible to examine the extent to which schools, function more smoothly by removing disruptive pupils to off-site special units. This is, however, not a relevant issue in a thesis concerned to evaluate units not schools.

What is more relevant is that attention to behaviour change as an evaluation tool applicable to off-site special units, permits comparisons to be made between modifications in the behaviour of pupils referred to units and possible changes in behaviour.
of matched pupils who remain in mainstream education.

This could produce an interesting outcome for if the drift of the reviewed literature is accepted, then we must look beyond the pathologies of individual pupils to the institutions in which the pupils undertake their learning and to the structural arrangements and systems of those institutions.

Lawrence, Steed and Young (1984) have said that,

Schools are gatekeepers of values: at the level of publically accepted forms of conduct and behaviour they are expected to produce children who are well behaved, who can exercise self control with the ability to match appropriate behaviour to a variety of public contexts and with an armamentarium of personal character traits which will fit them for membership of our society... (p. 11).

The literature reviewed tends to suggest that there is much inherent in the approach of off-site special units which, if imported into mainstream schools would make them better able to perform their gatekeeper role for all pupils who pass through their portals.

In these circumstances application in practice of the views expressed in the relevant literature could produce a school system that would make off-site special provision unnecessary.
It has already been indicated, however, that such changes are by no means imminent. In the meantime, the available literature suggests that mainstream education may learn much of value from the experiences of the off-site special units. Most significantly there is as we have seen, evidence to suggest that some pupils find in the units a rare opportunity to experience a sense of achievement and to benefit from a favourable staff-student ratio in a small face-to-face environment. The long term benefits in respect of reducing delinquency, unemployment rates and social disadvantage for these pupils may be considerable.

It has to be said that those evaluation studies of off-site units that have been reported are not encouraging but then this may tell us more about possible inadequacies in the criteria used for evaluation than about possible inadequacies in the units themselves.

The present study is concerned to seek a criterion for evaluating off-site special units bearing in mind the various comments made above and using a measure of behaviour change for pupils referred to units.

Until evidence is forthcoming from such studies
which offers positive direction to the contrary, it would seem at the very least premature to describe Local Education Authority Off-Site Special Units as an inappropriate response to the problem of disruptive behaviour in schools.
1. Introduction

In view of the volume of literature on Local Education Authority off-site special units for disruptive pupils and the considerable amount of experience that a number of Local Education Authorities have of off-site special units, it seemed reasonable to commence the present study on the supposition that major evaluation exercises had been carried out. However, subsequent research failed to produce evidence of such evaluation exercises.

Units have been set up on the flimsiest of evidence and it is clearly essential they are monitored. Tattum (1982) has realistically said, "The units themselves need to be evaluated, otherwise how can a local authority know whether they are successful or not." (p. 302).

On this premise, this research undertaking commenced by an approach being made to every LEA in England and Wales for information about off-site units within that Authority. Each Authority was asked to:

(a) Confirm that off-site units for disruptive pupils were employed and if not, what alternative provisions were utilised.

(b) Provide details of such units.

(c) Indicate any evaluation procedures employed or planned within the Authority.

(d) Outline the conclusions of evaluation exercises and/or give permission to visit relevant officers of the Authority to discuss the matter further.
Requests were dispatched to 104 Authorities. Replies were initially received from 72 Authorities. Follow-up enquiries indicated that all but three of the 32 Authorities who failed to respond to the enquiry had no experience of off-site special units for disruptive pupils. The three Authorities with such experience provided information in response to the follow up enquiry.

Thus, information was made available in respect of (probably) all LEA off-site special units within England and Wales.

The nature of the material provided by Local Authorities varied considerably, but was in the main descriptive.

Even so, it was apparent that many of the Local Authorities themselves felt that the special units were doing a good job and so presumably some evaluation exercise had taken place, even though this was not obvious from the material made available.

With this in mind, a sample of the Local Authorities was approached to arrange a personal visit to discuss the matter more fully. The sample was selected non-randomly in order to provide:

(a) a geographical spread of Local Authorities,
(b) an urban/rural balance,
(c) the most productive outcome likely in the light of the information already provided.

As a result, visits were arranged and executed to fifteen Local Education Authorities.
In each case, the point of contact (most generally the Principal Educational Psychologist) was asked:
(a) General questions about provision for disruptive pupils from schools within that Authority.
(b) Specific questions about the provision of off-site units for disruptive pupils.
(c) For information regarding the evaluation of off-site units.

The Authorities visited showed considerable variation in their provision for disruptive pupils. Almost every possible form of response to the problems identified by the Authorities were evident. These varied from a peripatetic team of trouble shooters to a purpose built off-site unit. Similarly, staffing levels varied as also did attitudes towards referral into the unit and reintegration into mainstream schooling.

2. Comments from Local Education Authorities

Two of the Authorities visited indicated movement away from the concept of off-site units.

One of these reported that 60% of the pupils referred by schools to the School Psychologist had histories of parental separation, divorce, marital conflict, etc., although only 8% of these pupils were in care. In such circumstances, the Authority felt that the continuation of off-site special provision was inappropriate. The fact that 70% of pupils suspended from schools within the Authority were of immigrant origin, raised a further issue of some sensitivity.
In arriving at a decision to terminate off-site provision, the Authority had undertaken a detailed analysis of the levels of academic attainment of pupils referred to the School Psychologist because of behavioural problems.

The Authority concluded that, in general, the pupils were not sufficiently retarded to receive remedial education but not capable either of coping adequately in a mainstream school. On these grounds some form of continued intervention for these pupils was justified, even though the Authority felt that off-site provision was inappropriate.

The second of the Local Education Authorities who had abandoned the principle of off-site units, concluded similarly and had, as a result, established the concept of an Educational Support Team with a flexible remit to work closely with social services and other agencies in support of the mainstream school system.

Within this Authority, no pupils were removed from their mainstream school as a result of disruptive behaviour and hence the role of the Support Team was to aid the pupil and the mainstream school staff, in the context of their normal setting.

In arriving at the decision to establish an Educational Support Team, as opposed to an off-site special unit, the Authority had attempted to evaluate the problems surrounding disruptive pupil behaviour by means of a
detailed consideration of the case histories of the pupils concerned. This, the Authority admitted was 'problematic' but nevertheless led the relevant officers of the Authority to determine that the problem of disruptive behaviour could only be approached on an individual basis and must include working closely with schools, pupils, parents, social services and other agencies.

The specific view of the Authority was that "... any new provisions must be framed firstly in terms of improving assistance to schools to help them deal more effectively with disruptive pupils. Only as a secondary and ultimate solution in the most special cases should transfer to a special exclusion centre be contemplated."

The reasons given for these conclusions, have formed the rationale of the team, i.e.,

(a) The nature of the problem itself and the very considerable uncertainties about definitions and likely outcomes.

(b) That by definition any alternative school can only deal with strictly limited numbers.

(c) To reinforce the ordinary determination of schools to manage their own pupils and maintain their own authority.

(d) To create a range of options for dealing with this problem.

(e) To provide the means of assessing the disruptive pupil and his needs.

(f) To provide the proper opportunity for other agencies
to assist within the normal school situation.

(Quoted from LEA material provided).

These points in particular form the basis of the daily workings of the team, since it is felt that to remove a child to a unit, undermines the potential for provision in schools and places the pupil on the first rung of a potential delinquent career. Perhaps one of the more 'unspoken' aims of the team has been, therefore, to work for success in the school situations, thus minimising demand for a unit. To date, no unit facility has been provided.

By contrast, several of the Local Education Authorities visited in connection with the present study, had well developed off-site provision.

One Authority in particular had re-emphasised its off-site units by laying down a carefully structured procedure for Headteachers to follow when disruptive behaviour was encountered. This procedure followed through five stages, as follows:

Stage I - Interview of pupil and parents by Headteacher.

Stage II - If disruptive behaviour persists, then further interview followed by report to Director of Education who will write to the parents and refer the matter to the Education Welfare Officer.

Stage III - Suspension.

Stage IV - Report on pupil to and by the
Stage V - Referral to off-site unit.

Thus off-site units within the Authority are known as 'Stage V Centres' and the Local Education Department's 'Discipline Working Party' has recommended that the facilities at the Stage V Centres should be examined to establish whether they are meeting the needs of the pupils.

It is not known, however, if an appropriate measure has yet been devised for this purpose or when such evaluation is likely to take place.

Most Authorities visited in connection with the present study took a less structured stance. Indeed, one Authority stressed the extent to which the three off-site units within that Authority had each developed its own separate ethos. This was not seen as a problem since the units shared certain common aims. On the basis of the analysis of case histories of pupils who had attended the units, it was felt that only a small minority of pupils required provision outside the ambience of the mainstream school. For this small number of pupils the essential need was for a close working relationship of home, pupil and school - a relationship which could be better fostered within the flexible environment of the unit than in the mainstream school.

Several Authorities thus saw the evaluation of off-site units in terms of an individualised analysis of pupils'
case histories and had, indeed, made major policy decisions on the basis of the conclusions drawn from such evaluation exercises.

One Local Education Authority recognised the need to go further than this but was restrained by the difficulties of evaluating the needs of pupils who reflect a wide range of problems. It was felt that pupils with severe problems were increasingly being referred to the off-site units within the Authority and the initial philosophy underpinning the units had changed accordingly. The off-site units of this Authority had been founded on the assumption of short-stay. Evaluation of the units was, therefore, geared to early return to school. The ever increasing range of problems displayed by pupils and the greater severity of these problems had lead to periods of longer stay in the unit. A new criterion of evaluation was thus necessary and the Authority was acutely aware of this. Not dissimilar difficulties presented themselves to a number of Authorities. For example, another Local Education Authority confirmed that pupils referred to off-site units within that Authority included those with special personal needs and hence a therapeutic model had developed for the units, with short stay giving way to long stay.

This Authority had attempted to evaluate the off-site units, using reintegration to mainstream schooling as the essential criterion. The Authority recognised that given that therapeutic aims cannot be satisfactorily met in a
short stay unit, then failure to satisfy early
reintegration does not serve to satisfactorily evaluate
the work of the unit. The Authority did, however, condemn
the extent to which many pupils left the unit without
returning to mainstream schooling and deemed, somewhat
subjectively, that schools saw the units as an alternative
to the mainstream school rather than a logical extension
of it and hence referred problem pupils to the unit too
late in the pupils' careers. The Authority concluded that
closer liaison between off-site units and mainstream
schools was necessary before a satisfactory means of
evaluating the work of the units could be devised.

One Local Education Authority, with just one off-site unit
serving the schools of the Authority, had admitted 71
pupils to the unit over a 5 year period. These pupils had
been categorised into 4 groups, i.e. 20 non-attenders, 27
conduct disordered pupils, 21 pupils with neurotic
disorders and 3 who were socially deprived.

Whilst the categories are subjective judgements and not
necessarily exclusive, the fact that only 27 are conduct
disordered, and these include overtly disruptive pupils as
well as severely withdrawn pupils, raises questions about
whether any evaluation procedure employed in respect of
the unit can provide reliable information about the effect
of the intervention on disruptive behaviour. Hence a
reported 41% return to mainstream does not tell us whether
the unit is successful in dealing with disruptive pupils,
some other category of pupil or some from each category.
The Authority nevertheless recommended, somewhat arbitrarily, that the unit needed 4 terms in which to effect a successful outcome from the unit, the age of admittance not being relevant.

Another Local Education Authority had approached a justification for the continuation of off-site units from the vantage point of assessing pupils in mainstream schools. The vital importance of accurately estimating the capabilities of lower ability pupils and providing appropriate education was highlighted by the Authority who recognised the need to provide special places of withdrawal for these pupils.

One Authority had established an off-site special unit specifically for disruptive pupils, as opposed to school refusers, those with neurotic disorders, and others. It was, therefore, of especial interest to consider any evaluation technique employed by this Authority. In practice, evaluation was based on the insightful experience of the relevant officers of the Authority. Whilst this may lack objectivity, valuable lessons were reported by the Authority, notably that:

(i) Phased return to selected lessons had proved more successful than had been anticipated.

(ii) A sudden return tended to be accompanied by adverse behaviour.

(iii) The children put forward for admission to the unit are almost entirely those with no abnormal pattern of personality but with characteristics of an
assertive, outgoing nature. Typically, pupils admitted to the unit were from family backgrounds which displayed disturbance. In other words, the disruptive behaviour was, in the view of the Authority, associated with deviant environmental circumstances in children of normal outgoing personality rather than with deviant personality characteristics originating within the child.

The same Authority goes on to justify the continued use of its off-site special unit in the following words,

Most pupils arriving at the Centre express strongly negative sentiments about their school. This is perhaps not unexpected. At the point where they are considered for exclusion or referral to the Centre the relationship between pupil and school has effectively broken down. This is not to say that staff have ceased to do their utmost, nor that blame lies with the school. The reasons for such a breakdown are various and some are not even related to the school. The experience at the Centre shows that a complete break from the school provides many advantages - for the children particularly, but also for the school. It allows for a period of recuperation during which the pressures that were on the pupil are removed. They no longer come face to face with their peers who perhaps encourage their anti-social behaviour; they are no longer seeking diversions from the school work which they have so often decided they will not do properly; and they are no longer faced with staff who cannot possibly have time to satisfy their need to talk and discuss. During this period it is possible to give them time to review their own attitudes and behaviour as well as those of others. It is difficult to see how a unit within the school can allow a sufficient break from the school for these really disruptive pupils. The unit within the school may well provide a sanctuary with great benefit for pupils with other or lesser problems, but perhaps not so effectively for those admitted to the off-site centre.

There are disadvantages, particularly with the return to school from a unit at a distance from the school, but it is submitted (without conclusive
evidence) that a unit such as the one in question has the balance of advantages.

(Quoted from LEA material provided).

The Authority readily admits that the comments are not based on any conclusive evidence and this was indeed a common thread of the views expressed by most Local Education Authorities visited as part of the present study.

Indeed, two of the Authorities visited produced detailed colour brochures setting out not only the aims and objectives of their off-site special units, but syllabi for the main subjects taught, procedure, guidelines, etc. In both cases the brochures were over 30 pages long and would do credit to a minor Public School. In neither case was any attempt at evaluation undertaken. This is not to imply that the units were other than as excellent as the brochures indicated but it would be impossible to say so with any objectivity.

Only one Local Education Authority visited, (other than the Inner London Education Authority, which is discussed separately), had made notable strides in the production of what the Authority itself described as 'hard data' as opposed to 'impressionistic comments'.

Amongst an impressive amount of measuring instruments, was included a 'Maturity Checklist', which required teachers to collect information of pupils' social behaviour, learning skills, classroom behaviour, independence skills, educational skills, interests and play preferences.
Further information was collected about the pupil's home circumstances, out of school and in school behaviours and the circumstances in which their disruptive behaviour was displayed.

This could provide a valuable tool in gaining further understanding of the disruptive pupil and his/her needs. It is less clear that it is useable as an instrument for measuring changes in disruptive behaviour before and after off-site intervention, since it is dependent for completion on persons who remain in an on-going monitoring situation in relation to the pupil. This is clearly not the case when pupils are removed to off-site units.

Thus, visits were made to 15 Local Education Authorities in England and Wales (including the Inner London Education Authority, which will be discussed further below), during the academic year 1983/84. Although the sample of 15 Authorities was selected non-randomly, they included rural and urban Authorities and also Authorities in the North East, North West, Midlands, South East, South and South West of England and North and South Wales. All of the Authorities concerned, with the exception of the Inner London Education Authority, have provided information on the strict understanding that the source remains confidential.

Confidentiality has been strictly adhered to, but it can be realistically stated that the Local Education Authorities in question represent a varied sample of Authorities and provided a realistic cross-section of all
Local Education Authorities, including those who provided written information but were not visited.

As indicated above, the provision by Local Education Authorities of off-site special units showed much variation.

In the absence of common features, it is not surprising that attitudes towards evaluation varied. For some, the criterion for success was reintegration into school. For others, the question was, "Why is the pupil in the Unit? If he has stopped displaying the behaviour that brought about his referral to the unit, then success has been achieved." For others again, a series of criteria would need to be met which may include success in academic progress, behaviour displayed, attendance, satisfactory work experience, etc.

3. The Inner London Education Authority

With the exception of the ILEA (ILEA, 1978), (ILEA, 1980), (ILEA, 1981a), (ILEA, 1981b), (ILEA, 1982), (ILEA, 1983), no Authorities had undertaken an objective and formalised evaluation exercise of off-site units for disruptive and disaffected pupils.

The Director of Research and Statistics for the Inner London Education Authority was first asked by the Authority to report on proposals for monitoring and evaluating the Authority's initiatives in respect of disruptive behaviour, early in 1978 (ILEA, 1978).

It was felt at that time that any evaluation must be

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concerned with the attainment of the several related objectives of the authorities initiatives. These objectives covered the three broad areas of:

(a) The education of the pupil.
(b) The organisation of the units.
(c) The careers of the teachers involved.

It was most evident, however, that the evaluation of the attainment of all these objectives was neither technically possible nor practicable with the resources available and that the most profitable way forward was to work towards the formulation of a detailed statistical picture. The Authority indicated that it was not proposed to organise conventional summative evaluation since this would depend on being able to measure the impact of the intervention.

Not surprisingly, the findings contained in the report of the first monitoring survey (ILEA, 1980) may be described as suggestive rather than conclusive and concentrated on the provision of basic information on the type and number of centres and the characteristics of the pupils referred to the centres.

Subsequent attempts at evaluation by the ILEA (1981 and 1983) utilised an objective measure of behaviour.

A summary of the ILEA evaluation exercises in 1981 indicated that when results based on teachers' perceptions of pupil behaviour at referral and at termination were analysed, significant differences in the desired direction were indicated.
In order to test this hypothesis it is clearly necessary to establish a research model whereby a pupil's behaviour can be measured on referral and at termination and any changes in behaviour seen against those of a control pupil.

Whilst the ILEA has not undertaken such an exercise, the Authority has produced a test measure which could prove useful to this end.

The ILEA (1981) prepared a Behaviour Checklist consisting of statements that teachers had made in their referrals or in their discussions with other teachers that described the actual behaviour that was seen to be disruptive. This Behaviour Checklist could be used on a before and after intervention basis, indicating any changes in the child's actual behaviours as seen by the teachers.

The Inner London Education Authority was of the view that in so far as the Checklist is tied to actual behaviours and some estimate of their relative frequencies, the Checklist should be sensitive to actual change in pupil behaviour and less inclined than some measures to reflect simply a change in teacher perception.

Clearly such a tool could be useful in assessing the impact of a number of different interventions used in connection with disruptive behaviour, including off-site special unit provision.

The Inner London Education Authority has also devised a
Post-Intervention Questionnaire, but unless pupils return to mainstream schooling for a reasonable further period of time, such a questionnaire must clearly have limited value.

4. Concluding Comments on Local Education Authority Provision of Off-Site Special Units.

It is clear that despite numerous reported monitoring exercises (Mortimore, et al. 1983) there is a singular lack of a rigorous evaluation of off-site special units. Bailey and Denham (1987) have attempted to set down a base line by which on-site withdrawal units may be assessed, but it is not clear that even this much has been achieved in respect of off-site special units for disruptive and disaffected pupils. Fish (ILEA 1985), referring to on-site withdrawal units, states that there is a major need for a clear framework when dealing with pupils who display disruptive behaviour. If this is true of on-site units where separation from mainstream schooling is limited, then it is surely even more significant in respect of off-site units, with the inherent problems highlighted above.

If the Local Education Authority which claimed that most pupils in units are not sufficiently retarded to receive remedial education but are not able enough to benefit from mainstream schooling, is correct, then there would seem to be a case for off-site special provision.

Yet such provision needs to be evaluated if its continuation is to be justified and the case-study
approach, employed by many Authorities, is not sufficiently rigorous to satisfy independent observers that any improvement in a given pupil's behaviour is not due to spontaneous remission or some other causal influence.

A number of Authorities have highlighted the problems associated with the evaluation of special units when the pupils referred to them display a range of different types of problems, for which one single measuring tool would be inappropriate.

Similarly, a number of Authorities point up the extent to which a criterion for successful outcome from the intervention is difficult to define and difficult to measure. If some pupils leave school directly from the unit, or return to school for only a brief period before leaving, it is difficult to devise a satisfactory instrument to measure change in behaviour following the intervention of the special unit.

Several key issues would seem to arise from these points and from the experiences of Local Education Authorities in general in respect of the evaluation of off-site provision:

(a) That at least one LEA has devised a before and after intervention measure and has experience of using the measure, albeit, without a control group. This should be considered for further use, with modification if necessary and supported by other well used measures, before seeking any new untried device.

(b) No experience is available to be drawn on where a
control group has been employed in evaluating off-site provision. If an evaluation is to have any credibility then a control group must be utilised.

(c) Many pupils in most off-site units are referred to the unit for reasons other than disruptive behaviour per se. In any attempt to evaluate the work of the unit a decision must first be made about the criterion for success for the unit. If this decision is (say) an improvement in pupil behaviour as a result of the intervention of the unit, then it would be necessary that only those pupils referred to the unit because of behaviour problems should be included in the study. Pupils referred for persistent truancy, etc., should, therefore, be excluded. As several Local Education Authorities pointed out, this may in practice involve an arbitrary decision about the reason why a pupil was referred to the unit. Nevertheless, it is clear that some pupils are quite specifically not referred to the unit because of disruptive behaviour, but for other aspects of performance considered unacceptable to the school. The same criterion for successful outcome from the intervention may not apply equally to them all.

(d) A study designed to evaluate the effect of the intervention of an off-site unit on pupil behaviour, must of course, endeavour to ensure that all other possible interventions remain constant. This is a
difficult matter. Several Local Education Authorities drew attention to the importance of establishing close ties with home and social service agencies for pupils in special units, because it was recognised that a multiplicity of influences may be coming to bear upon them. Indeed, it is interesting that for one Authority referrals were the responsibility not of the Educational Psychologist but of the Education Welfare Officer. It would almost certainly not be possible to establish a controlled and valid research programme which takes into account all possible influences coming to bear upon a young person who has been referred to an off-site special unit for disruptive and disaffected pupils. It is, therefore, probably the case that so long as a sufficiently large sample of pupils is considered and that this sample is matched by a control group of reasonable match, then a test of the effect of the intervention of the special unit is sufficient to permit a conclusion to be drawn about cause and effect, even though not all other possible influences remain necessarily constant.

It is in the light of these considerations that a methodology has been devised.
1. **Introduction**

A classical example of a research programme utilising matched pairs of pupils is provided by S. and E. Glueck (1950). For this monumental work the experimental and control groups consisted of two groups of boys - 500 delinquents and 500 non-delinquents.

For the Gluecks it was necessary to form matched pairs of pupils, who differed by virtue of their delinquency but for whom other possible variables were matched and held constant. The Gluecks' study determined to match 500 delinquent boys with 500 non-delinquent boys in four notable respects, viz age, general intelligence, ethnico-racial origin and type of neighbourhood of residence.

Whilst it is hardly possible to replicate this "...arduous, expensive piece of criminological research, supported by numerous foundations utilizing a large distinguished staff under the direction of one of the most eminent American research teams in the field of criminology", (Rubin, 1951, p. 106), it is possible to learn from it. Certainly the arguments put forward by the Gluecks to match pupils on the basis of age, general intelligence, ethnico-racial origin and type of neighbourhood of residence, are persuasive and would appear to be equally relevant
to the present study.

The relevance of age resides in the belief that maladjustment and misbehaviour are often deemed to vary with age. Whilst general intelligence standing alone is recognised as not always a predictor of disruptive behaviour, it is nevertheless considered to form an important part of the protocol covering the diagnosis of intellectual make-up, and may therefore also be a relevant factor. Ethnico-racial origin, redesignated for the present study, as social class background, is an important criterion for matching, since there is a school of thought which stresses that ethnic and social deprivation, account for variations in behaviour tendencies. Residence in a particular neighbourhood is included because the view remains widespread that the conditions in some areas from which a school draws its pupils, breed responses conducive to the emergence of disruptive behaviour in school.

Drawing upon the Gluecks' justification for endeavouring to control these variables, the present writer determined to utilise these same four criteria for similarity between the members of matched pairs of pupils, to add the fifth criterion of sex similarity but to set as the foremost criterion that of close similarity of
disruptive behaviour, displayed in the classroom setting.

Here any similarity with the Gluecks' study ends, for whilst the Gluecks' lengthy and costly study utilised detailed procedures for the determination of the variables age, intelligence ethnico-racial origin and area of residence, this was clearly not practicable in the present study. The matching for age, intelligence, social class origin and neighbourhood background, were determined by the school and to this extent naturally lack the precision which might be possible in a large scale research project.

Nevertheless, the information required of schools in order to identify control pupils on the above basis was generally well known to them and may be deemed to be reasonably reliable.

2. An Assessment of Disruptive Behaviour - The Behaviour Checklist

In order to determine a control group of pupils, it was considered necessary to find out what behaviour the referring teacher found problematical and to derive a measure of its frequency compared to other children in the class or in that teacher's experience. This enabled a criterion to be accepted for comparing a 'control' pupil against a 'experimental' pupil.
To prepare such a measure, teachers were consulted for their views on what constituted disruptive behaviour. As indicated in the preceding section, (see p. 247), the ILEA (1981) had prepared a Behaviour Checklist consisting of statements that teachers had made in their referrals or in their discussions with other teachers that described the actual behaviour that was seen to be disruptive. This proved a suitable starting point in preparing a Behaviour Checklist for use in the present study.

Bearing in mind what has been said previously concerning the need to look for explanations of disruptive behaviour beyond the individual pupil, it follows that neither the Behaviour Checklist nor any other established measure of behaviour can be expected to provide other than teachers' perceptions of pupils' behaviour. Moreover, different schools have different rules and hence disruptive behaviour can come to have different meanings. Such differences may, indeed, apply between classes within a single school.

It is with these considerations in mind that the Behaviour Checklist was initially developed by the Inner London Education Authority and subsequently modified by the writer for use in the present study.
As Coulby and Harper (1985) (in referring to the ILEA Checklist) suggest, it would have been misleading to have designed the initial Checklist such that a simple list of behaviours would be ticked to indicate whether the behaviour was displayed or not. Some indication of frequency was also needed. Without undertaking a series of controlled observations, however, it is not possible to establish absolute frequencies of a behaviour.

Therefore, it is necessary to ask the teacher to make a judgement of how frequent the behaviour was displayed relative to other pupils. This relative judgement has the advantage, by reference to the behaviour of other pupils, of taking context into account, to some extent.

Use of the Behaviour Checklist, in its original form, in the Inner London Education Authority, was reported to have, "Proven to have extensive practical value." (Coulby and Harper, 1985, p.38)

A modified version of the ILEA Behaviour Checklist was distributed to all Secondary School Heads in one Education Authority with the request that they comment on the efficiency of the Checklist as an embracing description of disruptive behaviours experienced by teachers within the school. They were asked to add to the list and delete from it in order
to produce a comprehensive list of disruptive
behaviours, grouped into broad categories of
behaviour.

Fourteen schools responded by either confirming
their agreement with the list of behaviours stated
or by adding a number of additional behaviours, which
it was felt had proven significantly disruptive
within that particular school. As a result, the
following behaviours were added to the checklist:

- Displays symptoms of tiredness
- Puts feet on chair/desk
- Opens/closes window without permission
- Adorns self with ink
- Locks doors, e.g. toilet doors
- Writes on noticeboard
- Complains unreasonably about classroom
  conditions
- Deliberately coughs and sneezes
- Uses make-up to provoke
- Induces vomiting
- Loiters in corridors to harass staff
- Removes notices from notice-boards
- Plays with toys or other possessions e.g. radio
- Attracts attention of passers by through
  windows
- Interferes with other pupils practical work
- Taunts other pupils
- Makes sexual advances to opposite sex
- Contaminates others' food
- Openly refuses to do punishment work/attend
detention, e.g. in front of other pupils
- Asks teacher offensive questions
- Yawns and displays boredom
- Refuses to enter classroom
- Refuses to leave room when instructed e.g.
because of misbehaviour.

The resulting list of behaviours was again
circulated to the same 14 schools to ask if they
deemed the revised format as suitable to describe the
disruptive behaviours experienced at the school and if further used to indicate degree of disruptive behaviour on a scale of "not often, often, very often," would the list be a satisfactory basis for comparing pupils. All 14 schools consulted deemed this to be the case, with the exception that two items on the checklist relating to verbal abuse of the teacher were deemed to be sufficiently similar that one should be excluded and also that inclusion of the behaviour described as 'cries' could prove confusing and misleading. The list was amended accordingly. The further suggestion that 'deliberately emits wind', should be included was deemed to be too idiosyncratic to warrant action.

The grouping of particular behaviours into sections or categories was commented on by several schools (i.e. 6 schools) as a useful arrangement in so far as it broke up an otherwise long list of behaviour traits and directed attention to particular groups of behaviours. This, schools reported, proved useful in identifying omissions from the initial list.

Thus a behaviour checklist was refined which could be used as a measuring instrument in the present study:

(i) to assist in assessing the level of match between
control group pupils and experimental pupils, and also

(ii) as a measure that may show change in behaviour before and after intervention.

Given that the revised form of the Behaviour Checklist has been developed from the comments of Headteachers, its value should be enhanced. (See Appendix I).

The Behaviour Checklist, as initially developed by the ILEA had, however, not been assessed for validity and reliability. On its own, it could not confidently be used to show changes in behaviour.

However, it was used in February 1981 and February 1982 by the ILEA Division 5 as an evaluation device and Checklist mean scores and Standard Deviations did not show other than minor differences from February 1981 to February 1982, despite the fact that there were 84 more test cases in 1982 compared with 1981.

<table>
<thead>
<tr>
<th>February 1981</th>
<th>February 1982</th>
</tr>
</thead>
<tbody>
<tr>
<td>(65 cases)</td>
<td>(149 cases)</td>
</tr>
<tr>
<td>Mean Frequency</td>
<td>39.4</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>25.6</td>
</tr>
<tr>
<td></td>
<td>40.0</td>
</tr>
<tr>
<td></td>
<td>23.5</td>
</tr>
</tbody>
</table>

This perhaps provides some evidence that the Checklist was obtaining comparable results in terms of Means and Standard Deviations.

Some indication of the external validity of the
checklist can be gained by correlating it with the Ovract Scale of the BSAG (i.e. that scale of the BSAG deemed in the above ILEA study as the most descriptive of disruptive behaviours). Correlation of the scores for 63 pupils assessed in February 1981 and February 1982 yielded a \( r = 0.53 \).

It has to be stated that the sample did not represent a normal distribution of scores. If scores could have been taken on a normal distribution, the correlation would probably have been higher. As it is, the result is sufficiently encouraging to consider refining the Checklist and seeking further tests of validity and reliability.

The present writer obtained an estimate measure of reliability using the 'split-half method' and Spearman-Brown formula (Moser and Kalton, 1971).

As a result, the reliability coefficients for the Behaviour Checklist were:

(i) Reliability of the Behaviour Checklist when used with the Experimental Pupils in the Pilot Study \( = 0.6810 \).

(ii) Reliability of the Behaviour Checklist when used with the Control Pupils in the Pilot Study \( = 0.9735 \).

The figures indicated above give support to the view that the Behaviour Checklist, in the revised form used in the present study, constitutes a reliable
measure for comparing changes in behaviour, before and after intervention.

This contention is further supported by repetition of the Spearman-Brown 'split-half method' in respect of the study of 14 pairs of matched pupils where 'before intervention' assessments for the experimental pupils were undertaken by teachers from the referring schools.

In this case the reliability figures produced are as follows:

(i) Split-half reliability of the Behaviour Checklist when used with the Experimental Pupils, \( r = 0.7088 \).

(ii) Split-half reliability of the Behaviour Checklist when used with Control Pupils, \( r = 0.8369 \).

Given that validity and reliability data for assessments of the type represented by the Behaviour Checklist are normally much lower than those for mental and educational tests, it is reasonable to proceed with the utilisation of the Behaviour Checklist on the basis of the above reliability figures, especially where the Checklist is used together with the Bristol Social Adjustment Guides.

3. An Assessment of Disruptive Behaviour - The Bristol Social Adjustment Guides
Although Coubly and Harper (1985) report that the Behaviour Checklist, originally devised by the Inner London Education Authority, has wide scale practical value, the present writer is not aware that the Behaviour Checklist has been put to extensive use and it has probably not been used in a controlled experimental situation. It was, therefore, deemed desirable to use a second measure of behaviour in the present study, alongside the Behaviour Checklist. The well-used Bristol Social Adjustment Guides were an obvious choice. (See Appendix II)

The Bristol Social Adjustment Guides (Stott, 1974) were chosen as an appropriate test measure of behaviour despite the limitations of this type of assessment indicated by Yule (1968) and mindful of the attempt to validate it after it was adopted in the National Child Development Study (Ghodsias, 1977). A number of studies validating the Bristol Social Adjustment Guides, have been published, both in respect of the 1956 edition of the Guides and the later 1970 edition (Lunzer, 1960; Stewart, 1962; Carney, 1963; Chazan, 1964; Nunnally, 1967; Davie, Butler and Goldstein, 1972; Stott, 1974a).

An element of validation is achieved if the results tally with the assessments of teachers or others who know the children well in a day-to-day working
relationship (Stott 1974a).

With this in mind, Lunzer (1960) presents an example of an attempt to validate the BSAGs by asking 20 class teachers to select children who were (a) withdrawn, (b) aggressive, (c) well adjusted, and to complete for them the Day-School edition of the BSAGs (i.e. as used in the present study).

Following the procedure recommended in the first edition of Stott's 1958 edition of the manual for the Bristol Social Adjustment Guides, he gave double weight to the more severe indications of maladjustment. This would have raised the means for the two disturbed groups by between 2 and 3 points, but would hardly have affected that for the well-adjusted. Lunzer (1960) indicated the following results:

<table>
<thead>
<tr>
<th></th>
<th>Withdrawn</th>
<th>Aggressive</th>
<th>Well-adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Children</td>
<td>39</td>
<td>42</td>
<td>45</td>
</tr>
<tr>
<td>Weighted Mean Score</td>
<td>17.56</td>
<td>20.33</td>
<td>2.40</td>
</tr>
</tbody>
</table>

The difference between the mean total scores for the withdrawn and aggressive groups is not significant, showing that the BSAG contained no strong bias towards acting-out or delinquent forms of behaviour disturbance.

A co-efficient of reliability for the BSAG total...
score, calculated by Winer's formula, was shown by Stott (1974a) to be 0.8021.

The internal reliability of the BSAG 1970 revision was assessed by means of the Co-efficient Alpha (Nunnally, 1967). This is an estimate of internal consistency based on the average correlations among the items. A Co-efficient Alpha was obtained for each of the core syndromes and associated grouping as follows:

Unforthcomingness 0.7403
Withdrawal 0.5937
Depression 0.6553
Inconsequence 0.8330
Hostility 0.7976
Peer Maladaptiveness 0.7570
Non-syndromic over-reaction 0.6685
Non-syndromic under-reaction 0.5697
Neurological symptoms 0.4542*

*Virtually unused in the present study.

A reliability estimate for the Ovract and Unract scales was calculated by means of a modified Alpha Co-efficient on stratified Alpha (Nunnally 1967) and was as follows:

Unract 0.8284
Ovract 0.9098

Since the BSAG provides essentially a contemporary assessment of a child's behaviour, its completion
at intervals, can be used as a means of assessing the effects of particular therapies or of placement in a special unit (Stott, 1974b). It has the further advantages of:
(a) Being reasonably familiar to teachers in schools and special units.
(b) Having national norms.

As with the Behaviour Checklist, it also has the merit of allowing assessment to be undertaken without the direct involvement of the pupil.

This last point was deemed of particular importance to the present study, in respect of both the Behaviour Checklist and the BSAG, since direct pupil involvement could have been a cause of sensitivity, especially in respect of those pupils chosen as controls. Indeed, it is probable that a high refusal rate would have been experienced had schools been required to involve control pupils directly in testing, with the concomitant involvement of parents, etc.

The criticism that the BSAG is more a measure of the teacher's perception of a pupil's behaviour rather than the pupil's actual behaviour, could in some respects be an advantage since the basis of a referral is necessarily the perception by a teacher or group of teachers, that there is a problem.
In every instance where the BSAG was employed in the present study, the teacher concerned with completing the BSAG was approached personally and instructed in its use.

4. **Method**

If the aim of the study is to show change in behaviour, or lack of it, during the period a pupil spends in a special unit, then clearly the research model must involve a referred pupil being 'tested' at the point of entry into a special unit and tested again at the point of exit and for any change in behaviour shown, or lack of it, to be compared with any change in behaviour, or lack of it, in a matched control pupil over the same period of time.

In applying this model, it is necessary to keep in mind a particular issue raised in the Review of Literature. Thus, if as Jones and Davies (1975) claim, pupils in off-site special units are likely to display deterioration in behaviour at a stage some time later than initial entry into the unit, then an evaluation procedure that examines pupils at entry, may understate the pupils' level of disruptiveness. This can perhaps be overcome by ensuring that, (a) the tests carried out at entry are in fact completed not immediately at the time of entry but after a short delay when the pupil has
settled into the unit, and (b) a sample of pupils referred to units are tested at entry by both unit staff and teachers from the referring schools, and discrepancies in test scores taken into account. The present study remains mindful of both issues and the methodology employed accordingly.

Arrangements were made initially with two LEA off-site special units for disaffected pupils serving one Authority, and subsequently three LEA off-site units serving another Authority, for all pupils entering the units to be tested at the point of entry to the unit, by means of the Bristol Social Adjustment Guides and Behaviour Checklist. For each referred pupil, a matched pupil was found from the same school of origin and a Bristol Social Adjustment Guide and Behaviour Checklist completed by the school in respect of that pupil. Each pupil was again tested by use of Bristol Social Adjustment Guides and Behaviour Checklist at that point when the referred pupil either left school or returned to mainstream schooling.

This programme, which was trialed by a pilot study comprising 15 disaffected pupils who had been referred to off-site units, established the broad research model for the study.

5. The Control Group
To determine a control group for pupils with behaviour problems who are referred to a LEA unit for disaffected pupils presents a special problem. Pupils so referred are perceived to have displayed behaviours deemed intolerable to the school. A satisfactory match pupil presumably similarly displays behaviours deemed intolerable to the school and yet remains in a mainstream school. In practice, this has proven to be less contradictory than seemed at first apparent. Even so, it is clear that there are limits to the extent to which 'strictness' in determining the match can be applied.

Whilst the essence of this point may be accepted, it remains necessary to determine a 'reasonable' criterion for matching pupils and for measuring the accuracy of the match.

Once a pupil had been referred to the special unit, and this information provided to the present writer, contact was made by letter with the Headteacher of the referring school. The Headteacher was provided with an outline of the main aim and purpose of the research study. This was considered a very necessary if time consuming step in order to allay the concern of the school that confidentiality may be broken, to ensure that the political sensitivity of the study did not lead to lack of response and to meet the
normally accepted protocol concerned with contacting schools.

In each case, a telephone call was made to the school to follow-up the letter and to arrange a meeting with the Headteacher.

A meeting was considered of prime importance despite the very considerable difficulties experienced in responding to Headteachers' conveniences and the remote location of a number of schools. On several occasions more than one initial meeting was necessary because of unforeseen circumstances arising at a given school causing the Headteacher to become unavailable, etc.

The importance of this procedure was supported by the fact that a total of 165 separate visits were made to schools during the course of the study (including the pilot study), and no refusals were encountered. Indeed, the study was notable for the co-operation and support given by the schools, including that of Headteachers and staff at all levels.

First visits to schools, arranged to follow-up the initial letter of contact, numbered 83 visits to 59 different schools.

The purpose of the first meeting was to ensure that
the Headteacher and/or delegated member of staff was fully familiar with the BSAG and Behaviour Checklist and to determine a match pupil. The Headteacher and delegated member of staff were invited to discuss the referred pupil, identifying major behaviour traits, home circumstances and school achievements. The School representatives were then requested to identify a match pupil, currently within the school, as similar as possible in the opinion of the teachers to the referred pupil. In a few cases, this proved to be impossible, such were the ideosyncratic traits of the referred pupil. In most cases, however, it was possible for the teachers to 'nominate' a pupil who was in their opinion a 'reasonable' match in all respects.

This is, of course, a process dependent upon the teacher's subjective judgement. Both the referred pupil and the match pupil have been known to the same teacher and subjective judgements made in respect of both of them; in the one case such as to determine that the pupil be referred to a special unit and in the other case such as to identify a reasonably matched pupil who, in spite of behavioural problems, remained in the school. The behavioural checklist provided a means of introducing some check of 'matchness' in respect of actual behaviour. It was not felt possible, or necessary, to attempt to produce a check of matchness
in respect of home circumstance, although all schools were able to assist in this respect. Evidence of similarity in respect of school attainment was provided by the school. In some cases, the evidence of similarity was furthered by the fact that both the referred pupil and the matched pupil had been assessed by the same Educational Psychologist and that a narrow decision had been taken in referring one of the pupils to a special unit and returning the other to the school of origin.

It was evident from comments made by a number of Local Education Authorities who were visited in the initial stages of the present study, that some pupils referred to off-site units would display behaviours that could not be matched within the referring school and remain of value to the study. For example, pupils referred to the unit by virtue of truancy as opposed to disruptive behaviour per se, are likely to show greater change in behaviour as a result of the intervention of the special unit than are truanting pupils who remain within the school, no matter how well matched.

Such pupils were, therefore, excluded from the study together with all pupils referred to the unit for any other purpose than that of displaying disruptive behaviour deemed unacceptable to the referring school. With this in mind a specific
definition of disruptive behaviour has been
explored in the present study. (See Appendix IV).

Closeness of match may be deemed to be considerable
in many cases and when the no-matches and poor-
matches are excluded, it may be maintained that
sufficient reasonable matches remain to permit
reliable comparison. (See Appendix V).
PILOT TO THE EMPIRICAL STUDY

The research programme outlined in the preceding section was piloted in one Local Education Authority in North East England, where two Off-Site Special Units are present and 15 referred pupils were involved.

Several points of importance resulted from the pilot study.

The preparedness of the referring schools to discuss the case histories of referred pupils in order to find a match pupils was especially encouraging. School records permitted the matched pupil to be considered in terms not only of disruptive behaviour exhibited in class, but also in respect of age, sex, school achievement, intelligence, school catchment and home circumstances. Clearly, few pupils were perfectly matched in all possible respects but closeness of match, in the considered opinion of the school, was greater than might have been expected.

Once it was ascertained that a high level of match could be achieved for some pupils it followed that in order to maintain this level, more pairs of pupils than expected would be rejected on the grounds that the level of match was below the standard.

It was intended that this subjective measure, which
is dependent on an analysis of school records by teachers together with the present writer, could be verified by the use of the Behaviour Checklist as an instrument for measuring match. In the event this proved only partially the case and the Behaviour Checklist emerged as a more reliable before and after intervention measure than it did a measure of closeness of match. Whatever method of scoring is used in order to employ the Behaviour Checklist as a measure of closeness of match, the score does not accurately compare one pair of pupils with another. It is not always clear, therefore, that a given score necessarily indicated a good match.

The most significant question arising from the pilot study centred around the question of whether the BSAG and Behaviour Checklist test schedules should be completed by mainstream school staff or by the off-site special unit staff.

It would clearly be desirable for all schedules for both referred and matched pupils to be completed by the same teacher, both in respect of the pre-intervention and post-intervention schedules.

Obviously the special unit staff are in no position to complete schedules on behalf of the matched pupils since only teachers in the mainstream schools have access to this information.
Again, mainstream school teachers are only in a position of completing post-intervention schedules when pupils return to mainstream schools and remain there for a sufficient period of time for the teachers to monitor behaviour. However, the experience of the pilot study was that a considerable number of pupils either returned to a different school or left school directly from the unit.

The Bristol Social Adjustment Guides for those pupils who were referred to the units, were completed by the school of origin and not by staff at the unit. This was so because it was a procedure of the Local Education Authority that the referring school be required to provide the unit with a completed Bristol Social Adjustment Guide at the point of the pupil entering the unit.

In the light of these circumstances, the present writer requested that the school of origin similarly complete a Behaviour Checklist in respect of each of the pupils referred to the units.

Fifteen pupils initially composed the experimental group of pupils for the pilot study. Of these fifteen pupils, five pupils had been referred to one or other of the two units for reasons other than that of disruptive behaviour, e.g. persistent truancy. These pupils were
excluded from the study. A further two pupils referred to the units could not be matched with suitable control pupils. Hence the effective pilot sample was reduced to eight matched pairs of pupils.

Despite the small size of the sample, the quality of match for the remaining eight pupils was considered to be good on the basis of the information provided by the participating schools and Student's t test was deemed to be an appropriate 'before and after' intervention measure for the matched pairs of pupils.

The Correlated t test is used wherever the same pupils are being compared before and after intervention, whilst the Independent t test is used wherever different pupils are being compared.

Thus when the experimental pupils are being compared before and after intervention and when the control pupils are being compared before and after intervention, the Correlated t test is employed. When the experimental pupils are being compared before intervention with the control pupils and when the experimental pupils are being compared after intervention with the control pupils, the Independent t test is employed.

In order to apply 'before and after' intervention comparisons a decision had first to be made about what constituted the point of 'before' and what constituted
the point of 'after' intervention.

The point of entry to a special unit for disruptive and disaffected pupils was clearly a suitable point at which the 'before-intervention' measure could be applied, so long as the relevant assessment was completed by someone who was familiar with the pupils' behaviour. The most appropriate point for the 'after-intervention' measure was less obvious. Since the stay of pupils in the unit varied considerably there was no clear time limit on the length of the intervention. What was more, since pupils tended to leave the units at that point at which they showed behaviour improvement, the termination of stay at the unit was not a satisfactory point at which to carry out a meaningful test of the units' ability to improve pupils' behaviour.

It was, therefore, determined to apply the 'after-intervention' assessments at a given point in time, i.e. one academic year of approximately ten months after the commencement of the study, or earlier if the referred pupils left the unit for whatever reason.

The matched control pupils were assessed at those same points of time as was consistent with the criterion established for the timing of tests for the experimental pupils.

By comparing the mean scores achieved by the experimental
group of pupils and by the control group of pupils, on both BSAG and Behaviour Checklist tests, it was possible to show whether behaviour change, as measured by the tests, had occurred during the period of intervention by the unit.

Such change showed that the experimental group of pupils and the control group of pupils, who were comparatively well matched prior to the intervention of the unit were less well matched following the intervention of the unit. The change would seem to result from a reduction in the scores (i.e. an improvement in the behaviour) of the experimental group of pupils, comparative to the control group of pupils.

This may be shown diagrammatically and by statistical analysis utilising Student's t test.
Mean Scores

Pilot Study

N = 8 pairs

BSAG Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL GROUP</td>
<td>23</td>
<td>27.25</td>
<td>+4.25</td>
</tr>
<tr>
<td>EXPERIMENTAL GROUP</td>
<td>23.375</td>
<td>14.875</td>
<td>-8.5</td>
</tr>
</tbody>
</table>

Behaviour Checklist Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL GROUP</td>
<td>40.5</td>
<td>37.875</td>
<td>-2.625</td>
</tr>
<tr>
<td>EXPERIMENTAL GROUP</td>
<td>52.75</td>
<td>27.5</td>
<td>-25.25</td>
</tr>
</tbody>
</table>
Analysis (BSAG Scores)

Comparing the two groups of eight pupils i.e. the eight experimental pupils and the matched group of eight pupils comprising the control, the results of t tests were as follows:

Test- BSAG/IP: Experimental pupils at entry to the unit, assessed by Bristol Social Adjustment Guides and compared with the experimental pupils (i.e. themselves) at the conclusion of the intervention as determined by the criterion outlined above, assessed by Bristol Social Adjustment Guides.

Before: $\overline{x} = 23.375$  
SD = 6.726  

After: $\overline{x} = 14.875$  
SD = 7.976

Significantly different at 95% with df = 7.

Test- BSAG/2P: Control pupils at those points in time before and after intervention matched to the pupils comprising the experimental group, as outlined above, assessed by Bristol Social Adjustment Guides.
Before: $\bar{x} = 23$ \hspace{1cm} After: $\bar{x} = 27.25$

SD = 6.325 \hspace{1cm} SD = 10.146

Not significantly different.

Test- BSAG/3P: Experimental pupils at entry to the unit, assessed by Bristol Social Adjustment Guides and compared with the control pupils at the same points in time, assessed by Bristol Social Adjustment Guides.

Exp: $\bar{x} = 23.375$ \hspace{1cm} Control: $\bar{x} = 23$

SD = 6.726 \hspace{1cm} SD = 6.325

Not significantly different.

Test- BSAG/4P: Experimental pupils at the conclusion of the intervention, as determined by the criterion outlined above, assessed by Bristol Social Adjustment Guides and compared with the control pupils at the same points in time, assessed by Bristol Social Adjustment Guides.

Exp: $\bar{x} = 14.875$ \hspace{1cm} Control: $\bar{x} = 27.25$

SD = 7.976 \hspace{1cm} SD = 10.146

Significantly different at 98% with df = 14.
Discussion (BSAG Scores)

It is noteworthy that no significant difference is observed between the experimental pupils and the control pupils when first tested by Bristol Social Adjustment Guides prior to the intervention of the unit. Significant difference occurs in the behaviour scores of the experimental pupils during the period of the intervention whilst no significant difference occurs in the behaviour scores of the control pupils over the same period of time. A significant difference exists between the behaviour scores of the experimental pupils and control pupils at the point of the application of the second Bristol Social Adjustment Guides test, following intervention for the experimental pupils.

The implication is clear. If the experimental pupils and control pupils are indeed well matched and if the only known variable distinguishing between the two groups of pupils over the period of time, is the intervention of the special units for the experimental pupils, then it is possible that the units have exerted a significant effect on the behaviour of the pupils referred to the units, as measured by the Bristol Social Adjustment Guides.

Examination of the 'before' and 'after' Bristol
Social Adjustment Guides scores show that of the eight 'before' scores for the experimental pupils, six were higher at the point of 'before' compared with the point of 'after'. Hence it may reasonably be concluded that if the change in 'before' and 'after' scores for the experimental pupils has altered significantly during the period of intervention, then it has altered significantly in producing improved behaviour, as measured by the Bristol Social Adjustment Guides.

No such improvement is observable from scrutiny of the 'before' and 'after' scores for the matched control pupils, where in five cases the score shows a deterioration over the period in question and in three cases the score shows an improvement. The change, over the period, is not significant at the 0.05 level.

The fact that a comparison of the experimental and control pupils prior to the intervention shows no significant difference between the two groups whilst comparison between the two groups of pupils after intervention does show significant difference, suggests that notable change has occurred in one of the groups.

This implies that the experimental and control pupils, who were matched at the outset of the study,
become less closely matched during the period of intervention by the unit for the experimental pupils.

The point is a telling one so long as the level of initial match is in all cases reasonably good.

In order to attempt to confirm the quality of the closeness of the match of each pair of experimental and control pupils, the Behaviour Checklist was assessed as a measure of match, as referred to previously and as outlined in the ensuing section.

Pupils' matched scores, before intervention, on the Behaviour Checklist ranged from 79 to 150. Pupils' matched scores, after intervention, on the Behaviour Checklist ranged from 17 to 110. The relatively high scores before intervention may denote a good level of match since they imply a considerable number of disruptive behaviours shared in common by the matched pair of pupils. It would, be unwise to draw a conclusion from such scores on the basis of a small sample of eight pairs of pupils. Even so, the much reduced size of the matched scores for some pupils following intervention, by suggesting that the level of match has become poorer during the period of intervention, may confirm the significant results of the Bristol Social Adjustment Guides test and similarly imply that one group of pupils had changed in respect of behaviour displayed, over the period
under analysis.

This may, of course, be further assessed by using the Behaviour Checklist not as a means of attempting to measure the quality of match of pairs of pupils but rather as a further measure of change in the recorded behaviour of the experimental pupils on the one hand and control pupils on the other, over the period of the intervention.

**Analysis (Behaviour Checklist Scores)**

Replicating the analysis indicated previously where the Bristol Social Adjustment Guides tests where utilised, but employing the Behaviour Checklist, the results of t tests were as follows:

Test - BC/IP: Experimental pupils at entry to the Unit, tested by Behaviour Checklist, and compared with the experimental pupils (i.e. themselves) at the conclusion of the intervention, as determined by the criterion outlined previously, tested by Behaviour Checklist.

Before: $\overline{x} = 52.75$  
SD = 25.631

After: $\overline{x} = 27.5$  
SD = 27.586

Significantly different at

- 285 -
98% with df = 7.

Test - BC/2P: Control pupils at those points in time before and after intervention, matched to the pupils comprising the experimental group, as outlined above, tested by Behaviour Checklist.

Before: $\bar{x} = 40.5$  
After: $\bar{x} = 37.875$

SD = 12.062  
SD = 13.420

Not significantly different.

Test - BC/3P: Experimental pupils at entry to the Unit, tested by Behaviour Checklist and compared with the control pupils at the same points in time, tested by Behaviour Checklist.

Ex: $\bar{x} = 52.75$  
Control: $\bar{x} = 40.5$

SD = 25.631  
SD = 12.062

Not significantly different.

Test - BC/4P: Experimental pupils at the conclusion of the intervention, as determined by the criteria outlined previously, tested by Behaviour Checklist and compared with the control pupils at the same points in time, tested by Behaviour Checklist.
Ex: \( \bar{x} = 27.5 \)  
Control: \( \bar{x} = 37.875 \)  
SD = 27.586  
SD = 13.420

Significantly different at 90% with df = 14.

Discussion (Behaviour Checklist Scores)

If a less stringent level of significance is permitted than the 95% level of significance employed in respect of the results of the Bristol Social Adjustment Guides, (i.e. in test BC/4P), then the results of the Behaviour Checklist tests confirm the change in behaviour of the experimental pupils relative to the control pupils, during the period of intervention by the Off-Site Special Unit.

It is most apparent that test scores for the experimental group fell much more noticeably than they did for the control group of pupils. Indeed, the difference between the two groups in measured behaviour following the period of intervention by the special unit, is very considerable. There seems little doubt, therefore, that changes in behaviour have taken place and that this displays a marked improvement in the behaviour of the pupils who passed through the units, relative to those control pupils who remained in the schools.
Given the level of match achieved for some pupils and a resulting high rejection rate, together with the rejection of any pupils referred to the off-site special units for any reason other than disruptive behaviour in mainstream school, the pilot sample size was reduced from its initial 15 to 8.

Despite this reduced number, the results of the pilot study gave sufficient indication that a causal link may exist between the intervention and behaviour change to justify the employment of the same basic methodology to the main body of the study. This was based on one Local Education Authority in South Wales, where three special units are present and 50 referred pupils were involved in the study.

A further point of importance arose from the pilot study in that the pupils themselves expressed views about the value of their own experiences in off-site special units. It was felt that this could be a relevant issue and should, therefore, be pursued in the main study.
1. Introduction

Whilst the Pilot study offered clear encouragement to proceed with the main body of empirical research, it also highlighted a number of areas in which particular attention was necessary. These relate most notably to the following points:

(i) The pupils in the units visited during the Pilot Study had indicated positive support for the benefits they felt they had gained from the experience of spending a period of time at a Local Education Authority Off-Site Special Unit. This is somewhat surprising and it would be worth seeking confirmation of pupils' views about the units in the main empirical study.

(ii) Although it was the practice of the Local Education Authority responsible for the Units employed in the Pilot Study to require test schedules to be completed by schools when pupils are referred to off-site special units, this is not necessarily the case for Off-Site special units of other Local Education Authorities. Since the off-site special units utilised in the main empirical study are indeed within a different Local Education Authority,
where no such a requirement is placed upon the school, the implications of the point require most careful attention.

(iii) The length of the duration of the period of intervention by the special unit was established for the pilot study by the constraints of time imposed upon the present writer. The validity of a stated period of intervention is an important issue since many pupils will terminate their stay at a special unit precisely because it has been deemed that they show behaviour improvement. It is important, therefore, that a meaningful criterion relating to the duration of the intervention be established in respect of the main empirical study.

(iv) Use of the Behaviour Checklist as a devise for establishing the level of similarity between matched pairs of pupils, proved of questionable validity when used in the Pilot Study. If, therefore, the devise is to be used in the main empirical study, then the scores calculated should be deemed as no more than a guide to the present writer in attempting to ensure an overall quality of good matches.

(v) The use of Student's t test in analysing
behaviour change proved satisfactory in the Pilot Study. Its further use in the main empirical study may, therefore, be contemplated.

(vi) The formalised procedure for approaching those schools who refer pupils to LEA off-site special units, as established in the Pilot Study, proved most necessary and should be replicated throughout the empirical research programme.

It is deemed relevant to consider each of the above six points in further detail before proceeding to the empirical process.

2. Pupil Self-Measure

Given that the hypothesis under examination relates to the effectiveness of special off-site Units in bringing about change in the disruptive behaviour of pupils referred to the units, it would, as indicated previously, be interesting and relevant to note the views of the pupils themselves.

Utilising views expressed by pupils about causes of disruptive behaviour reported by Tattum (1984), and supplemented by the comments of Frude (1984), and others, the present writer was able to compose a
questionnaire of rather more than 20 questions, all of which relate to comments made elsewhere by pupils who have experience of being referred to an off-site special unit.

This series of questions was administered to all pupils in three off-site special units in one Local Education Authority in the third week of June, 1987. Thirty one pupils who were present at the three units at the designated time, participated in completing the questionnaire. (See Appendix III).

3. Establishing a Sample Where the Test Schedules for Referred Pupils are Completed by Both Unit Staff and Teachers from the Referring Schools

It was noted that in the case of the Pilot Study, the relevant Local Education Authority required teachers from schools which referred pupils to LEA off-site special units, to complete Bristol Social Adjustment Guides in respect of each pupil referred. This fact encouraged the present writer to make use of the Bristol Social Adjustment Guides together with the Behaviour Checklist and to request unit staff to complete a Bristol Social Adjustment Guide and Behaviour Checklist at the termination of the period of intervention by the unit, thereby establishing a before and after measure of behaviour. This procedure suffered from the disadvantage that
'before-intervention' measures were completed by teachers from mainstream schools and 'after-intervention' measures were completed by staff from the off-site special unit.

When therefore, it was ascertained that the Local Education Authority responsible for the three off-site special units utilised in the main empirical study, placed no requirement upon referring schools to test, by any means, the pupils dispatched to the Units, it seemed reasonable to request the staff of the units to complete Bristol Social Adjustment Guides and Behaviour Checklists in respect of all pupils received. Unit staff were requested to complete a Bristol Social Adjustment Guide and a Behaviour Checklist in respect of all referred pupils, at a time approximately three weeks after the pupil's entry into the unit.

The requirement that tests were completed by Unit staff only at a time approximately three weeks after the pupil's entry into the Unit, was stipulated inorder to meet a point raised in the review of literature (Jones and Davies, 1975). This states that pupil behaviour at the point of entry into an off-site special unit may show an improvement, followed by a subsequent deterioration. Hence tests completed by Unit Staff at the point when referred pupils enter the Unit, may understate the level of
disruptive behaviour as measured by the Bristol Social Adjustment Guides and the Behaviour Checklist.

There was also the merit that 'before-intervention' tests for the referred pupils would be completed by the same person who would be responsible for completing the 'after-intervention' tests. There was, however, a disadvantage resident in the fact that 'before-intervention' tests for the referred experimental pupils would be completed by unit staff, whilst the equivalent tests for the control pupils would of necessity be completed by teachers from the mainstream schools of origin.

This could prove to be a serious matter with possible deleterious effects upon the testing process, in so far as at least some aspect of the completion of the test measures may be influenced by the perception of the teacher. Certainly, the perception of mainstream teachers of that which constitutes unacceptably disruptive behaviour, may differ from that of unit staff who spend their working day with disruptive pupils.

In these circumstances it was deemed desirable to 'cross-check' the 'before-intervention' test scores of pupils referred to the units by requesting the referring school to also complete Bristol Social Adjustment Guides and Behaviour Checklists in respect
of a sample of 30% of the referred pupils.

For the experimental pupils included in the empirical study, therefore, tests relate to the perception of the pupil's behaviour by unit staff, approximately three weeks after the pupil entered the unit, whilst for 30% of the pupils, test measures reflect also the behaviour of these pupils as perceived by the mainstream staff, who had known the pupils over a longer period of time than had the unit staff.

4. **Duration of Intervention**

Coulby and Harper (1985), in their studies of pupils referred to ILEA off-site centres, considered the length of intervention in terms of the number of weeks of school time between the referral and the closure of a case. They analysed each case according to stated measures of outcome.

It was found that the length of intervention did not make a difference to outcome and interventions of only six weeks duration were no more or less successful than interventions of thirty six weeks.

This is an important point since it probably means that in the cases considered by Coulby and Harper, and indeed in most cases of pupils entering and leaving off-site units for disruptive pupils, some
decision process is going on at the point of return to mainstream school. Presumably, if a pupil is deemed to have made satisfactory progress in the unit or has arrived at a point when no further progress is considered likely, then the pupil may well leave the unit whether his or her stay at the unit has been six weeks or thirty six weeks.

In the present study, pupils were assessed at the point of entry into an off-site unit and again at the point of exit, irrespective of duration.

A concluding date was, however, set upon the empirical study and it was, therefore, determined that any pupils remaining in the Units after 20 months should be tested at this point of conclusion. A longer stay may imply a different purpose for the Unit.

5. The Behaviour Checklist as a Measure of Closeness of Match

The Behaviour Checklist was used as a guide to the writer to verify the quality of the match between the experimental group of pupils and the control group of pupils. Where so ever resulting scores were low, the level of match was scrutinised and if necessary, the pair of pupils were excluded from the study. To this end, a scheme for scoring was devised as follows:
Score 10 points if a precise given behaviour on both pupils' checklists are shown to be displayed 'very often'.

Score 6 points if a precise given behaviour on both pupils' checklists are shown to be displayed 'often'.

Score 5 points if a precise given behaviour is shown to be displayed as 'often' on one pupil's checklist and 'very often' on the paired pupil's checklist.

Score 2 points if a given behaviour within a section of the checklist from A to E is displayed as 'very often' on one pupil's checklist and a different behaviour in the same section of the checklist from A to E is displayed as 'very often' on the paired pupil's checklist.

Score 1 point if a given behaviour within a section of the checklist from A to E is displayed as 'often' on one pupil's checklist and a different behaviour in the same section of the checklist from A and E is displayed as either 'often' or 'very often' on the paired pupil's checklist.

Given this criteria for scoring the checklists, it should follow that a high score would indicate a matched pair of pupils who display similar disruptive
behaviour traits 'often' or 'very often'.

A low score may indicate a poor match, but it might indicate a low level of disruptive behaviour traits being displayed by both pupils. Given the nature of the exercise, this should not, however, be the case.

Clearly a criterion for determining that which constitutes a high score can only be arrived at by extensive use of the checklist to this end. Even so, it is possible to isolate those pairs of pupils which the teachers deem to be particularly good matches and allow this to be the basis against which a high score may be measured.

This is, perhaps, an attempt to produce a fairly sophisticated measure without a facility to validate it. In these circumstances, it might be relevant to use the behaviour checklist more simplistically by ignoring the sub-sections of the checklist A to E and merely totalling the number of disruptive behaviours displayed 'often' and 'very often' by the matched pair of pupils. In this form, the checklist is useable as a tool for assessing changes in behaviour following the intervention of the off-site unit.
Both methods have been employed in the present study, although it is as a 'before and after' measure that the Behaviour Checklist ultimately proved most valuable. The method of scoring employed to this end was, therefore, that which involved a simple total of the number of disruptive behaviours displayed 'often' and 'very often' by the pupils.

6. The Statistical Test Measure

In order to compare the sample groups of experimental pupils and the sample groups of control pupils, it was deemed appropriate to use W.S. Gossett's 'Student' t test (Ehrenberg, 1975). This statistical measure proved an appropriate test measure in analysing the results of the pilot study. It is especially suitable for the samples in question, where the sample size is small and the population standard deviation is not known. It is also fundamentally simple and able to be repeated for a number of sub-sample groups, thus providing a comparative measure for a number of separate tests.

The Correlated t test is relevant where the same pupils are being compared before and after intervention, whilst the Independent t test is used where different pairs of pupils are being compared. (See Appendix VI.)
Using Student's t test it is possible to compare sample groups of experimental pupils and sample groups of control pupils in respect of the following:

(i) The Main Study.

(ii) The Sample of the Main Study where 'before-intervention' tests for the experimental pupils were completed by teachers from the referring schools.

(iii) The Sample of the Main Study, outlined in (ii) above, taken together with the Pilot Study.

(iv) Sub-samples by Sex.

(v) Sub-samples by Unit.

(vi) Sub-samples by Age.

(vii) Sub-samples by length of stay in a Unit.

A non-directional test is necessary in each case since the sample may deviate significantly in either direction from the population mean (Bowen and Weisberg, 1977).

A 95 per cent confidence interval was deemed most appropriate (although reference is also made to other confidence intervals in relevant instances) to consider the Null Hypothesis, (Ho), that no difference exists between the groups under scrutiny.
Thus the hypothesis is established that significant differences exist between the groups in question when \( H_0 = 0.05 \), utilising tables for critical values of \( t \) (Fisher and Yates, 1948).

Each of the sample groups (i) to (vii), enumerated above, are considered by:

(a) Tabulation and graphical display of the mean score derived from Bristol Social Adjustment Guide tests and Behaviour Checklist tests for each of the sample groups (i) to (vii), where the experimental group and control group are compared before and after intervention.

(b) Analysis of the results of t tests and consideration of the Null Hypothesis in respect of comparing the experimental pupils before and after intervention; the control pupils before and after intervention; the experimental pupils before intervention with the control pupils at the same point in time; the experimental pupils after intervention with the control pupils at the same point in time. This exercise is carried out in respect of the results of both the Bristol Social Adjustment Guides and the Behaviour Checklists. Thus eight measures are analysed in respect of each of the sample groups (i) to (vii).
(c) Discussion of the above analyses in respect of each of the sample groups.

7. A Summary of the Procedure for the Empirical Study

The main empirical study drew information from three units within the area of one Local Education Authority. The Local Education Authority was not the same Authority as that employed in the Pilot Study.

The fundamental test procedure outlined below was followed in respect of each of the 50 pupils who comprised the study.

1. The present writer was advised of the arrival of a referred pupil in a LEA off-site special unit for disruptive pupils.
2. BSAG and Behaviour Checklists were completed by the head of the special unit.
3. School of origin contacted by letter and advised of the purpose of the study.
4. School of origin visited and the criteria for matched pupil discussed. Match pupil identified for control purpose.
5. BSAG and Behaviour Checklist completed by school in respect of match pupil.
6. BSAG and Behaviour Checklist completed by school
in respect of a sample of referred pupils in 30% of cases.

7. The present writer was advised of referred pupil's completion of period at the special unit.

8. A second BSAG and Checklist were completed by the head of special unit.

9. School of initial origin contacted by (a) letter and (b) visit and a second BSAG and Checklist completed in respect of the match pupil.

10. All eight schedules scored, i.e. BSAG and Checklist for referred pupil at point of entry into unit; BSAG and Checklist for match pupil; second BSAG and Checklist for referred pupil at point of exit from unit; second BSAG and Checklist for match pupil.

Additionally,

11. A pupil self-measure administered to all pupils attending the off-site units under scrutiny in the third week of June, 1987.

12. A sample of 15 pupils attending the same off-site units in the third week of June, 1987, were administered a Burt (Rearranged) Reading Test and a reading age ascertained. This proved of little significance beyond confirming that majority of pupils in off-site special units display a below average reading age. It is, therefore, given no more than passing mention.
In order to apply the 'before' and 'after' criterion established in the pilot study it was deemed desirable to:

a) Establish a set starting date for testing and to test all pupils entering the units after that date and to test each matched control pupils at the same point of time;

b) Establish a concluding date and test all pupils remaining at the Unit at this point of time, if they had not already been tested at an earlier point. It was decided to call 20 months the effective duration of the period of study, since longer than this would lead to school leaving age being reached by many pupils whilst for others a stay of over 20 months implies a containment facility rather than one concerned to improve behaviour.

By accepting a study duration of 20 months and ignoring those pupils already in the units at the time of the commencement of the study, it was always likely that the size of the sample under scrutiny would be restricted. In the event, 53 pupils were referred to the three units during the period in question. Of these, one pupil become delinquent and was removed from the unit. A further two pupils,
who had been referred to the units because of persistent school refusal, as opposed to disruptive behaviour, were removed from the sample.

In the case of one pupil who was referred to a special unit from a small school, it proved impossible to find a suitable match pupil. In respect of three additional pupils, the referring schools felt that no satisfactory match was possible. In one further case, the carefully guarded confidentiality regarding the identity of the matched control pupils proved too well guarded since the teacher responsible for providing the information about the matched control pupil, left the school and information regarding the identity of the matched control pupil was lost. Hence, whilst the 'before-intervention' information was provided, it was not possible to provide 'after-intervention' information in respect of this pupil.

In this way, the effective sample for the Main Study was reduced to 45 pairs of matched pupils, in respect of whom fourteen of the experimental pupils had information completed on entry to the units by both unit staff and also mainstream school staff.

It is recognised that whatever change in BSAG score or Behaviour Checklist score took place over the period in question, it could simply be as a result
of time passing or of change in peer group, school, home conditions or other circumstances. If, however, a significant number of changes are discernible for the experimental pupils (i.e. a lowering of scores on Bristol Social Adjustment Guides and Behavioural Checklists) and the only known variable in common is special unit intervention, then it would seem reasonable to make some causal link between the intervention and the change, especially if such change is not discernible in respect of the control pupils.

8. The Main Study

The effective group of 45 pupils who had been referred to one or other of three off-site special units in one Local Education Authority in South Wales over a period of 20 months were matched to 45 control pupils, chosen from the same schools of origin and who displayed similar attributes of sex, age, intelligence, social class origin, neighbourhood background and disruptive behaviour but who remained in the mainstream schools.

These 90 pupils constituted the main study.

The 45 experimental pupils referred to off-site special units, were tested by Bristol Social Adjustment Guides and Behaviour Checklist tests,
at the point of entry to the units and again at the point of the termination of the period of intervention by the off-site units.

Tests were in all cases completed by the staff of the unit. The results of the sample of instances where tests were also completed by mainstream teachers, are excluded at this stage.

The 45 control pupils, who also displayed disruptive classroom behaviour, were tested by Bristol Social Adjustment Guides and Behaviour Checklist tests by teachers in the mainstream schools at those times designed to coincide most closely to when schedules were being completed in respect of their matched partners who had been referred to off-site Special Units.

Comparative changes in the behaviour of the experimental pupils and the control pupils, over the period of intervention by the off-site special Units, may be shown diagrammatically and also by statistical analysis utilising Student's t test.
Mean Scores

Main Study

N = 45 pairs

BSAG Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
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<tr>
<td>CONTROL GROUP</td>
<td>19.8</td>
<td>22.133</td>
<td>+2.333</td>
</tr>
<tr>
<td>EXPERIMENTAL GROUP</td>
<td>14.022</td>
<td>15.244</td>
<td>+1.222</td>
</tr>
</tbody>
</table>

Behaviour Checklist Mean Scores

<table>
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<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL GROUP</td>
<td>38.689</td>
<td>38.889</td>
<td>+0.2</td>
</tr>
<tr>
<td>EXPERIMENTAL GROUP</td>
<td>26.8</td>
<td>16.6</td>
<td>-10.2</td>
</tr>
</tbody>
</table>
Analysis

The results of t tests were as follows:

Test- BSAG/1MS: Experimental pupils at entry to the Unit, assessed by Bristol Social Adjustment Guides, administered by Unit staff and compared with the experimental pupils (i.e. themselves) at the conclusion of the intervention, assessed by Bristol Social Adjustment Guides.

Before: $\bar{x} = 14.022$     After: $\bar{x} = 15.244$
SD = 7.767                      SD = 9.886

Not significantly different.
Result - Accept Ho.

Test - BSAG/2MS: Control pupils at those points in time before and after intervention, matched to the pupils comprising the experimental group, assessed by Bristol Social Adjustment Guides.

Before: $\bar{x} = 19.8$     After: $\bar{x} = 22.133$
SD = 7.225                      SD = 9.316

Significantly different at 90% with df = 44.
Result - Accept Ho.
Test - BSAG/3MS: Experimental pupils at entry to the Unit, assessed by Bristol Social Adjustment Guides administered by Unit staff and compared with the control pupils at the same points in time, assessed by Bristol Social Adjustment Guides.

Exp: \( \bar{x} = 14.022 \)  
     \( SD = 7.767 \)  
Control: \( \bar{x} = 19.8 \)  
     \( SD = 7.225 \)

Significantly different at 99.8% with df = 88.

Result - Reject \( Ho \approx 0.05 \).

Test - BSAG/4MS: Experimental pupils at the conclusion of the intervention, assessed by Bristol Social Adjustment Guides and compared with the control pupils at the same points in time, assessed by Bristol Social Adjustment Guides.

Exp: \( \bar{x} = 15.244 \)  
     \( SD = 9.886 \)  
Control: \( \bar{x} = 22.133 \)  
     \( SD = 9.316 \)

Significantly different at 99.8% with df = 88.

Result - Reject \( Ho \approx 0.05 \).

Test - BC/1MS: Experimental pupils at entry to the
Unit, assessed by Behaviour Checklist, administered by unit staff and compared with the experimental pupils (i.e. themselves) at the conclusion of the intervention, assessed by Behaviour Checklist.

Before: $\bar{x} = 26.8$  
$SD = 26.226$

After: $\bar{x} = 16.6$  
$SD = 16.364$

Significantly different at 98% with df = 44.

Result - Reject Ho at 0.05.

Test BC/2MS: Control pupils at those points in time before and after intervention, matched to the pupils comprising the experimental group, assessed by Behaviour Checklist.

Before: $\bar{x} = 38.689$  
$SD = 28.249$

After: $\bar{x} = 38.889$  
$SD = 29.630$

Not significantly different.

Result - Accept Ho.

Test - BC/3MS: Experimental pupils at entry to the Unit, assessed by Behaviour Checklist, administered by Unit staff and compared with the control
pupils at the same points in time, assessed by Behaviour Checklist.

Exp: $\bar{x} = 26.8$  Control: $\bar{x} = 38.689$

SD = 26.226  SD = 28.249

Significantly different at 98% with df = 88.

Result - Reject $H_0 \approx 0.05$.

Test - BC/4MS: Experimental pupils at the conclusion of the intervention, assessed by Behaviour Checklist and compared with the control pupils at the same points in time, assessed by Behaviour Checklist.

Exp: $\bar{x} = 16.6$  Control: $\bar{x} = 38.889$

SD = 16.364  SD = 29.630

Significantly different at 99.8% with df = 88.

Result - Reject $H_0 \approx 0.05$.

**Discussion**

it is notable that there is disagreement at the 0.05 level between the results of the Bristol Social Adjustment Guides tests and the results of the Behaviour Checklist tests.
It may be expected that if, as indicated previously, the behaviour of pupils referred to special units improves at the point of entry and then deteriorates, the Bristol Social Adjustment Guides, completed by Unit staff as a 'before-intervention' test when pupils enter the units, may understate the pupils' disruptive behaviour even though a short delay after entry was allowed before the schedules were completed. In such circumstances it is possible that changes in pupils' behaviour have taken place during the period of intervention but that the tests have failed to diagnose the differences. This is no more than conjecture but is supported by the fact that although the experimental pupils and control pupils were deemed by school staff to be well matched prior to intervention, both the Bristol Social Adjustment Guides and the Behaviour Checklist show there to be significant differences between the two groups of pupils at the 0.05 level. In short, both assessments imply that the two groups are not well matched, which would follow if the disruptive behaviour patterns of one of the groups was understated as a result of the assessment procedure. Both assessments confirm that the experimental and control pupils are significantly different when tested after intervention.

Having shown the experimental pupils and control pupils to be significantly different before intervention, the Behaviour Checklist indicates that
significant changes occur in the amount of disruptive behaviour displayed by the experimental pupils during the period of the intervention. The Behaviour Checklists similarly show that no significant differences occur for the control pupils over the same period of time. Notably, they further show that significant differences are evident when the experimental pupils and control pupils are compared at a point following intervention, suggesting that any distinction in behaviour displayed by the two groups has increased. It may be concluded that the experimental pupils, when tested by the Behaviour Checklist, changed significantly during the period of intervention, whilst the control pupils did not. A perusal of the individual test scores indicated this to be a change in respect of improved behaviour for the experimental pupils.

Whilst this is not confirmed by the results of the Bristol Social Adjustment Guides tests at the 0.05 level, it is notable that should a less critical level of significance have been accepted then a significant change in the control pupils, before and after intervention, would have been observable at the 0.1 level. Observation of the individual test scores indicated this to be a change in respect of a deterioration in behaviour for the control pupils.

Despite the lack of a clear confirmation of one test
measure by the other, there remains the suggestion that an improvement in behaviour has occurred for the experimental pupils during the period of attendance at a special unit. No such improvement is evident for the control pupils over the same period.

Against this background, it is clearly important to assess the results of a sample of pupils where the Bristol Social Adjustment Guides and Behaviour Checklist for the experimental pupils, are administered before intervention by teachers from the referring schools. This exercise is undertaken in the ensuing section.

9. **Sample of Main Study Where 'Before-Intervention' Tests for the Experimental Pupils Were Completed by Teachers from the Referring Schools.**

It has already been suggested that when test measures of disruptive behaviour are completed by unit staff in respect of pupils recently referred to the unit, the results of the tests may understate the level of disruptive behaviour. There is the further point that if unit staff complete the test measures in respect of pupils referred to the units whilst mainstream school staff complete the test measures in respect of the matched control pupils then it is possible that these two different teachers might use different standards.
of assessment, in so far as the test measures permit this to be the case.

In these circumstances it is important that in a sample of instances, the test measures utilised for both the experimental pupils and the control pupils are also administered as a 'before intervention' test by the same mainstream school teacher in respect of each matched pair of pupils.

Thus, for a sample of fourteen matched pairs of pupils, the Bristol Social Adjustment Guides and Behaviour Checklists, when used as a 'before-intervention' measure, were completed for both the experimental pupil and the control pupil comprising each matched pair, by the same teacher from the school from which the experimental pupils were referred.

The sample was drawn by testing one in three of the matched pairs of pupils sequentially.

The Bristol Social Adjustment Guides and Behaviour Checklists, were completed 'after-intervention' by the unit staff in the case of the experimental pupils and by the mainstream school teacher in the case of the matched control pupils. The mainstream school teacher who completed the 'after-intervention' tests for the control pupil was in each case the same teacher who
completed the 'before-intervention' tests.

Comparative changes in the behaviour of the 30% sample of the experimental pupils and control pupils, over the period of intervention by the off-site special units, may be shown diagrammatically and also by statistical analysis utilising Student's t test.
Mean Scores

Main Study where 'before - intervention' tests for the Experimental Pupils were completed by Teachers from the Referring Schools.

N = 14 pairs

BSAG Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL GROUP</td>
<td>22.143</td>
<td>30.286</td>
<td>+8.143</td>
</tr>
<tr>
<td>EXPERIMENTAL GROUP</td>
<td>23.071</td>
<td>16.357</td>
<td>-6.714</td>
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</table>

Behaviour Checklist Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL GROUP</td>
<td>34.714</td>
<td>41.714</td>
<td>+7.0</td>
</tr>
<tr>
<td>EXPERIMENTAL GROUP</td>
<td>34.929</td>
<td>17.857</td>
<td>-17.072</td>
</tr>
</tbody>
</table>
Analysis

The results of t tests comparing a 30% sample of experimental and control pupils of the Main Study, where tests for both the experimental and the control pupils were administered before intervention by mainstream teachers, are as follows:

Test - BSAG/1M: Experimental pupils at entry to the Unit, assessed by Bristol Social Adjustment Guides administered by mainstream school staff and compared with the experimental pupils (i.e. themselves) at the conclusion of the intervention, assessed by Bristol Social Adjustment Guides, administered by Unit staff.

Before: $\bar{x} = 23.071$    After: $\bar{x} = 16.357$
SD = 6.147           SD = 12.169

Significantly different at 99% with df = 13.
Result - Reject $H_0 = 0.05$.

Test - BSAG/2M: Control pupils at those points in time before and after intervention, matched to the pupils comprising the experimental group, assessed by
Bristol Social Adjustment Guides administered by mainstream teachers.

Before: \( \bar{x} = 22.143 \)  \( \text{After: } \bar{x} = 30.286 \)

\( \text{SD} = 5.926 \)  \( \text{SD} = 15.229 \)

Significantly different at 95% with \( df = 13 \).

Result - Reject Ho \( \alpha = 0.05 \)

Test - BSAG/3M: Experimental pupils at entry to the Unit, assessed by Bristol Social Adjustment Guides administered by mainstream school teachers and compared with the control pupils at the same points in time, assessed by Bristol Social Adjustment Guides.

Exp: \( \bar{x} = 23.071 \)  \( \text{Control: } \bar{x} = 22.143 \)

\( \text{SD} = 6.147 \)  \( \text{SD} = 5.926 \)

Not significantly different.

Result - Accept Ho.

Test - BSAG/4M: Experimental pupils at the conclusion of the intervention, assessed by Bristol Social Adjustment Guides and compared with the control pupils at the same points in time, assessed by Bristol Social Adjustment Guides.
Exp: $\bar{x} = 16.357$  Control: $\bar{x} = 30.286$

SD = 12.169  SD = 15.229

Significantly different at 95%
with df = 26.

Result - Reject Ho $\approx 0.05$.

Test - BC/1M: Experimental pupils at entry to the
Unit, assessed by Behaviour Checklist
administered by mainstream school
staff and compared with the
experimental pupils (i.e. themselves)
at the conclusion of the
intervention, assessed by Behaviour
Checklist administered by Unit staff.

Before: $\bar{x} = 34.929$  After: $\bar{x} = 17.857$

SD = 15.002  SD = 18.662

Significantly different at 99.8%
with df = 13.

Result - Reject Ho $\approx 0.05$.

Test - BC/2M: Control pupils at those points in
time before and after intervention,
matched to the pupils comprising the
experimental group, assessed by
Behaviour Checklist administered by
mainstream teachers.

Before: $\bar{x} = 34.714$  After: $\bar{x} = 41.714$
Test - BC/3M: Experimental pupils at entry to the unit, assessed by Behaviour Checklist administered by mainstream school teachers and compared with the control pupils at the same points in time, assessed by Behaviour Checklist.

Exp: $\bar{x} = 34.929$  Control: $\bar{x} = 34.714$
SD = 15.002  SD = 24.818
Not significantly different.
Result - Accept Ho.

Test - BC/4M: Experimental pupils at the conclusion of the intervention, assessed by Behaviour Checklist and compared with the control pupils at the same points in time, assessed by Behaviour Checklist.

Exp: $\bar{x} = 17.857$  Control: $\bar{x} = 41.714$
SD = 18.662  SD = 31.279
Significantly different at 99.8% with df = 26.
Result - Reject Ho $\alpha = 0.05$. 

SD = 24.818  SD = 31.279
Not significantly different.
Result - Accept Ho.
**Discussion**

Analysis shows the experimental pupils before intervention to differ from the experimental pupils after intervention significantly at the 0.05 level. Scrutiny of the Bristol Social Adjustment Guides scores confirms the difference which occurs over the period of intervention to be an improvement in behaviour, as measured by the Bristol Social Adjustment Guides. It is noteworthy that whilst the control pupils, compared before and after intervention by Bristol Social Adjustment Guides, also showed a significant change at the 0.05 level during the period of the intervention, scrutiny of the Bristol Social Adjustment Guides scores showed the change to be indicative of a deterioration in behaviour, as measured by the Bristol Social Adjustment Guides.

The fact of change in behaviour, as measured by the Bristol Social Adjustment Guides, has occurred over the period of intervention for the experimental group of pupils comparative to the control group of pupils, is confirmed by the significant difference between the experimental pupils and the control pupils at the 0.05 level at the conclusion of the intervention. Such difference was not discernable before the intervention.
Analysis of the results of the Behaviour Checklist tests confirms that whilst the experimental pupils and matched control pupils were not significantly different at the commencement of the intervention, change occurred for the experimental pupils during the period of intervention at the 0.05 level of significance. No significant change was observed in the case of the control pupils. At the termination of the intervention, significant difference between the experimental and control pupils was apparent at the 0.05 level.

Thus the difference in measured disruptive behaviour between members of the matched pairs of pupils had grown during the period of the intervention of the unit. Observation of the Behaviour Checklist scores showed that fewer disruptive behaviours were displayed by the experimental pupils at the end of the intervention than at the commencement of the intervention.

Taking together, the results of the Bristol Social Adjustment Guides and Behaviour Checklists, it is strongly suggested that change in behaviour occurred for the experimental pupils during the period of intervention by the Unit and that this change reflects an improvement in the disruptive behaviour displayed by the pupils. No similar improvement was
evident for the control pupils.

These conclusions are more evident for the 30% sample of the Main Study where the before-intervention tests for both the experimental and control pupils are completed by the mainstream teachers of the referring schools, than for the Main Study, as a whole.

It may be deduced, that the previously stated belief can be supported that the before-intervention assessments for experimental pupils may understate the level of disruptive behaviour if they are completed by Unit staff.
10. **The Sample of Main Study Where 'Before-Intervention' Tests for Experimental Pupils Were Completed by Teachers from the Referring Schools, Taken Together With Those Pupils comprising the Pilot Study.**

Given that the sample of 14 matched pairs of pupils comprising the sub-group discussed in the previous section were assessed by the Bristol Social Adjustment Guides and Behaviour Checklist in similar circumstances to the sample of 8 matched pairs of pupils comprising the pilot study, it would seem not unreasonable to consider the combined group of 22 matched pairs as a single sample, for the purposes of applying Student's $t$ test. The two groups, when taken together, produce a sample of matched pairs of pupils involved with 5 separate off-site special units drawn from 2 distinct Local Education Authorities, in different parts of the United Kingdom.

Thus, in the case of all 22 matched pairs of pupils, the Bristol Social Adjustment Guides and Behaviour Checklist, when used as 'before-intervention' measures, were completed for both the experimental pupil and the control pupil comprising each matched pair, by the same teacher from the school from which the experimental pupil was referred.
Comparative changes in the behaviour of the experimental pupils and the control pupils, over the period of intervention by the five off-site special units in two different Local Education Authorities, may be shown diagrammatically and, also by statistical analysis, utilising Student's t test.
Mean Scores

The sample of Main Study where 'before-intervention' Tests for Experimental Pupils were completed by Teachers from the Referring Schools, taken together with those Pupils comprising the Pilot Study.

N = 22 pairs

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL GROUP</td>
<td>22.0</td>
<td>29.182</td>
<td>+7.182</td>
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<tr>
<td>EXPERIMENTAL GROUP</td>
<td>23.182</td>
<td>15.818</td>
<td>-7.364</td>
</tr>
</tbody>
</table>

Behaviour Checklist Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL GROUP</td>
<td>36.818</td>
<td>40.318</td>
<td>+3.5</td>
</tr>
<tr>
<td>EXPERIMENTAL GROUP</td>
<td>41.409</td>
<td>21.364</td>
<td>-20.045</td>
</tr>
</tbody>
</table>

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Analysis

The results of t tests for this combined group of 22 matched pairs of pupils, where BSAG tests and Behaviour Checklist tests for both the experimental and the control pupils were administered before intervention by mainstream teachers, are as follows:

Test - BSAG/1MP: Experimental pupils at entry to the unit, assessed by Bristol Social Adjustment Guides, administered by mainstream school staff and compared with the same 22 experimental pupils at the conclusion of the intervention, assessed by Bristol Social Adjustment Guides, administered by Unit Staff.

Before: \( \bar{x} = 23.182 \) \quad After: \( \bar{x} = 15.818 \)

\( SD = 6.365 \) \quad \( SD = 10.857 \)

Significantly different at 99.8%. with \( df = 21 \).

Result - Reject \( Ho \neq 0.05 \).

Test - BSAG/2MP: Control pupils at those points in time before and after intervention, matched to the 22 pupils comprising the experimental group, assessed by
Bristol Social Adjustment Guides administered by Mainstream teachers.

Before: $\bar{x} = 22$  
SD = 5.309

After: $\bar{x} = 29.182$  
SD = 13.680

Significantly different at 99%.
with df = 21.

Result - Reject $H_0$ at 0.05.

Test - BSAG/3MP: Experimental pupils at entry to the Unit, assessed by Bristol Social Adjustment Guides administered by Mainstream school teachers and compared with the matched 22 control pupils at the same points in time, assessed by Bristol Social Adjustment Guides.

Exp: $\bar{x} = 23.182$  
SD = 6.365

Control: $\bar{x} = 22$  
SD = 5.309

Not significantly different.

Result - Accept $H_0$.

Test - BSAG/4MP: Experimental pupils at the conclusion of the intervention, assessed by Bristol Social Adjustment Guides and compared with the matched 22 control pupils at
the same points in time, assessed by Bristol Social Adjustment Guides.

Exp: $\bar{x} = 15.818$  Control: $\bar{x} = 29.182$
SD = 10.857  SD = 13.680

Significantly different at 99.8% with df = 42.

Result - Reject $H_0: \alpha = 0.05$

Test - BC/1MP: Experimental pupils at entry to the Unit, assessed by Behaviour Checklist, administered by school teachers and compared with the same 22 experimental pupils at the conclusion on the intervention, assessed by Behaviour Checklist.

Before: $\bar{x} = 41.409$  After: $\bar{x} = 21.364$
SD = 21.345  SD = 22.801

Significantly different at 99.8% with df = 21.

Result - Reject $H_0: \alpha = 0.05$.

Test - BC/2MP: Control pupils at those points in time before and after intervention, matched to the 22 pupils comprising the experimental group, assessed by Behaviour Checklist, administered by
school teachers.

Before: $\bar{x} = 36.818$  
After: $\bar{x} = 40.318$

$SD = 21.274$  
$SD = 26.296$

Not significantly different.  
Result - Accept Ho.

Test - BC/3MP: Experimental pupils at entry to the Unit, assessed by Behaviour Checklist, administered by school teachers and compared with the matched 22 control pupils at the same points in time, assessed by Behaviour Checklist.

Exp: $\bar{x} = 41.409$  
Control: $\bar{x} = 36.818$

$SD = 21.345$  
$SD = 21.274$

Not significantly different.  
Result - Accept Ho.

Test - BC/4MP: Experimental pupils at the conclusion of the intervention, assessed by Behaviour Checklist and compared with the matched 22 control pupils at the same points in time, assessed by Behaviour Checklist.

Exp: $\bar{x} = 21.364$  
Control: $\bar{x} = 40.318$

$SD = 22.801$  
$SD = 26.296$
Significantly different at 98% with df = 42.

Result - Reject Ho=0.05.

Discussion

The most notable outcome is that the results of analysing both the Bristol Social Adjustment Guides and the Behaviour Checklists, indicate that no significant difference in measured behaviour is observable between the experimental and control groups at a point before intervention but that for the Bristol Social Adjustment Guides a very significant difference at the 0.002 level is evident between the groups, after intervention. Difference at the 0.02 level is evident for the Behaviour Checklist results. The fact that both test measures agree on such notable differences between the groups, clearly implies that behaviour change, in so far as it is measured by the two test measures, has taken place for one of the groups relative to the other.

Whilst observation of the scores achieved by pupils on both the Bristol Social Adjustment Guides and the Behaviour Checklist, suggest that the changes in behaviour have occurred in respect of the experimental pupils rather than the control pupils, it is more difficult to demonstrate this
The results of the BSAG tests allow us to conclude that change has occurred for both experimental pupils and control pupils, over the period of intervention. This is in part confirmed by the results of the Behaviour Checklist which supports changes of statistical significance for the experimental group of pupils during the period of intervention, but not for the control pupils.

This would suggest that whatever changes that may have occurred for the control pupils during the period of intervention, were less significant than for the experimental pupils. However, given the agreed significant difference between the scores of the experimental and control groups at the termination of the intervention, it is most probably the case that the changes for experimental pupils on the one hand and control pupils on the other, were in opposite directions.

Consideration of the actual test scores gives support to this view. It is therefore possible to conclude that on the basis of the scores produced on the Bristol Social Adjustment Guides and the Behaviour Checklists, the experimental pupils, as a group, displayed improved scores whilst the control pupils showed an increase in test scores and
presumably, a concomitant deterioration in displayed behaviour.

It is worthy of note that the sample in question is more than 50% larger than that employed in the previous analysis, i.e. where the main study 'before-intervention' assessments for the experimental pupils were completed by teachers from the referring schools. It is also worthy of note that the pupils comprising the sample are drawn from five different off-site special units in two different Local Education Authorities.

The considerable change which occurred during the period of intervention in respect of the improved behaviour scores for the experimental group of pupils, comparative to the control group of pupils, would seem to suggest that the experimental group of pupils have encountered some significant influence upon their conduct. Given that these groups comprise of pupils who have experienced different lengths of stay in one of five separate units in two different Authorities, there would seem to be persuasive evidence to suggest that off-site special units are instrumental in producing improved behaviour.

That this is more evident for this sample of pupils than was the case for the Main Study of 45 pairs of
pupils as a whole, would seem to confirm the relevance of 'before intervention' test schedules relating to the experimental pupils, being completed by the same teachers from the referring schools who accepted responsibility for completing 'before intervention' test schedules in respect of the control pupils.
11. Main Study sub-divided by Sex

The review of literature offered some evidence to suggest that disruptive behaviours are not displayed equally by boys and girls (Richman et al., 1982). Also, that boys are more likely to be referred to special units than are girls (ILEA, 1983a). Certainly, it is the case in the present study that boys referred to the Units under scrutiny outweighed girls in the ratio of more than three to one, there being 34 boys and 11 girls in the sample of 45 pupils. It would be interesting to see if there is evidence to suggest that the boys respond differently than do the girls, to the intervention of the unit, in so far as this can be shown by before and after-intervention assessments, utilising the Bristol Social Adjustment Guides and the Behaviour Checklist.

A tabulated and diagrammatical comparison of the mean scores of the boys and of the girls is first shown before proceeding to an analysis of the results of t tests.
Mean Scores

Girls

N = 11 pairs

BSAG Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL GROUP</td>
<td>15.0</td>
<td>18.0</td>
<td>+3.0</td>
</tr>
<tr>
<td>EXPERIMENTAL GROUP</td>
<td>11.455</td>
<td>13.0</td>
<td>+1.545</td>
</tr>
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</table>

Behaviour Checklist Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL GROUP</td>
<td>37.091</td>
<td>28.0</td>
<td>-9.091</td>
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<tr>
<td>EXPERIMENTAL GROUP</td>
<td>16.818</td>
<td>11.455</td>
<td>-5.363</td>
</tr>
</tbody>
</table>
Mean Scores

Boys

N = 34 pairs

BSAG Mean Scores

<table>
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<tr>
<th>GROUP</th>
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<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL GROUP</td>
<td>21.353</td>
<td>23.471</td>
<td>+2.118</td>
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<tr>
<td>EXPERIMENTAL GROUP</td>
<td>14.853</td>
<td>15.971</td>
<td>+1.118</td>
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</tbody>
</table>

Behaviour Checklist Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL GROUP</td>
<td>39.206</td>
<td>42.412</td>
<td>+3.206</td>
</tr>
<tr>
<td>EXPERIMENTAL GROUP</td>
<td>30.029</td>
<td>19.029</td>
<td>-11.0</td>
</tr>
</tbody>
</table>
Analysis - Girls

Comparing the two groups of eleven girls, i.e. the eleven experimental girls and the matched group of eleven girls comprising the control, the results of t tests were as follows:

Test - BSAG/1G: Experimental girls at entry to the unit, assessed by Bristol Social Adjustment Guides and compared with the experimental girls (i.e. themselves) at the conclusion of the intervention, assessed by Bristol Social Adjustment Guides.

Before: $\bar{x} = 11.455$  
        $SD = 7.774$
After: $\bar{x} = 13$
       $SD = 12.083$

Not significantly different.

Result - Accept Ho.

Test - BSAG/2G: Control girls at those points in time before and after intervention, matched to the girls comprising the experimental girls, assessed by Bristol Social Adjustment Guides.

Before: $\bar{x} = 15$  
        $SD = 6.267$
After: $\bar{x} = 18$
       $SD = 7.469$
Significantly different at 80% with df = 10.

Result - Accept Ho.

Test - BSAG/3G: Experimental girls at entry to the unit, assessed by Bristol Social Adjustment Guides and compared with the control girls at the same points in time, assessed by Bristol Social Adjustment Guides.

Exp: $\bar{x} = 11.455$      Control: $\bar{x} = 15$
SD = 7.774                      SD = 6.267

Not significantly different.

Result - Accept Ho.

Test - BSAG/4G: Experimental girls at the conclusion of the intervention, assessed by Bristol Social Adjustment Guides and compared with the control girls at the same points in time, assessed by Bristol Social Adjustment Guides.

Exp: $\bar{x} = 13$      Control: $\bar{x} = 18$
SD = 12.083                      SD = 7.459

Not significantly different.

Result - Accept Ho.

Test - BC/1G: Experimental girls at entry to the
Unit, assessed by Behaviour Checklist and compared with the experimental girls (i.e. themselves) at the conclusion of the intervention, assessed by Behaviour Checklist.

Before: $\bar{x} = 16.818$      After: $\bar{x} = 11.455$
SD  = 17.161                    SD  = 10.308

Not significantly different.
Result - Accept Ho.

Test - BC/2G: Control girls at those points in time before and after intervention, matched to the girls comprising the experimental girls, assessed by Behaviour Checklist.

Before: $\bar{x} = 37.091$      After: $\bar{x} = 28$
SD  = 25.614                    SD  = 26.567

Not significantly different.
Result - Accept Ho.

Test - BC/3G: Experimental girls at entry to the Unit, assessed by Behaviour Checklist and compared with the control girls at the same points in time, assessed by Behaviour Checklist.
Exp: $\bar{x} = 16.818$  Control: $\bar{x} = 37.091$
SD = 17.161  SD = 25.614

Significantly different at 95% with df = 20.

Result - Reject $H_0 = 0.05$.

Test - BC/4G: Experimental girls at the conclusion of the intervention, assessed by Behaviour Checklist and compared with the control girls at the same points in time, assessed by Behaviour Checklist.

Exp: $\bar{x} = 11.455$  Control: $\bar{x} = 28$
SD = 10.308  SD = 26.567

Significantly different at 90% with df = 20.

Result - Accept $H_0$.

**Discussion**

It is notable that no significant difference is observable between the experimental girls before and after intervention, whether tested by the Bristol Social Adjustment Guides or the Behaviour Checklist.

In fact the only test which points to a significant difference between groups at the 0.05 level, is that
which compares the experimental girls and the control girls before intervention. This could imply that the matched pairs were poor matches for the girls. Certainly the 'match-scores' are quite low in a number of cases. Given, however, the care taken in matching pairs of pupils (see Appendix V), this should not be the case. It is perhaps more likely that the assessment scores for the experimental pupils are understated by the Unit staff, for the reasons previously stated. This would produce an apparent difference between the experimental pupils and the control pupils. All that can be said with any certainty, however, is that for the eleven girls in question, no significant change at the 0.05 level is measurable over the period of intervention for the experimental girls. A difference that is significant at the 0.2 level is indicated for the control pupils when assessed by BSAG. Examination of raw scores indicates some evidence of worsening behaviour for these pupils, but in the absence of supporting evidence too much cannot be concluded from this.

**Analysis - Boys**

Comparing the two groups of 34 boys, i.e. the 34 experimental boys and the matched group of 34 boys comprising the control, the results of t tests were as follows:
Test - BSAG/1B: Experimental boys at entry to the unit, assessed by Bristol Social Adjustment Guides and compared with the experimental boys (i.e. themselves) at the conclusion of the intervention, assessed by Bristol Social Adjustment Guides.

Before: $\bar{x} = 14.853$  
$SD = 7.581$

After: $\bar{x} = 15.971$
$SD = 8.943$

Not significantly different.

Result - Accept Ho.

Test - BSAG/2B: Control boys at those points in time before and after intervention, matched to the boys comprising the experimental boys, assessed by Bristol Social Adjustment Guides.

Before: $\bar{x} = 21.353$  
$SD = 6.821$

After: $\bar{x} = 23.471$
$SD = 9.463$

Significantly different at 80% with $df = 33$.

Result - Accept Ho.

Test - BSAG/3B: Experimental boys at entry to the unit, assessed by Bristol Social Adjustment Guides and compared with
the control boys at the same points in time, assessed by Bristol Social Adjustment Guides.

Exp: $\bar{x} = 14.853$  Control: $\bar{x} = 21.353$

SD = 7.581  SD = 6.821

Significantly different at 95% with df = 66.

Result - Reject Ho $\neq 0.05$.

Test - BSAG/4B: Experimental boys at the conclusion of the intervention, assessed by Bristol Social Adjustment Guides and compared with the control boys at the same points in time, assessed by Bristol Social Adjustment Guides.

Exp: $\bar{x} = 15.971$  Control: $\bar{x} = 23.471$

SD = 8.943  SD = 9.463

Significantly different at 99.8% with df = 66.

Result - Reject Ho $\neq 0.05$.

Test BC/1B: Experimental boys at entry to the unit, assessed by Behaviour Checklist and compared with the experimental boys (i.e. themselves) at the conclusion of the intervention, assessed by Behaviour Checklist.
Before: $\bar{x} = 30.029$  
After: $\bar{x} = 19.029$

$SD = 27.792$  
$SD = 18.805$

Significantly different at 95% 
with df = 33.

Result - Reject $Ho = 0.05$.

Test - BC/2B:  
Control boys at those points in time before and after intervention, matched to the boys comprising the experimental boys, assessed by Behaviour Checklist.

Before: $\bar{x} = 39.206$  
After: $\bar{x} = 42.412$

$SD = 29.031$  
$SD = 29.713$

Not significantly different.

Result - Accept $Ho$.

Test - BC/3B:  
Experimental boys at entry to the unit, assessed by Behaviour Checklist and compared with the control boys at the same points in time, assessed by Behaviour Checklist.

Exp: $\bar{x} = 30.029$  
Control: $\bar{x} = 39.206$

$SD = 27.792$  
$SD = 29.031$

Significantly different at 80% 
with df = 66.

Result - Accept $Ho$.   

- 347 -
Test - BC/4B: Experimental boys at the conclusion of the intervention, assessed by Behaviour Checklist and compared with the control boys at the same points in time, assessed by Behaviour Checklist.

Exp: $\bar{x} = 19.029$  Control: $\bar{x} = 42.412$
SD = 18.805  SD = 29.713

Significantly different at 99.8% with df = 66.
Result - Reject Ho $\alpha = 0.05$.

Discussion

There was no reason to suppose that the matched pairs were poor matches for the boys. Given the results of the tests of the Main Study, it might, therefore, have been expected that a significant difference would be discernible for the experimental pupils, compared before and after intervention. Although this was not the case at the 0.05 level of significance in respect of the BSAG assessment, a difference was measured by the Behaviour Checklist at the 0.05 level of significance. Observation of the Checklist scores showed this to be a likely improvement in disruptive behaviour displayed by the experimental pupils.
That the difference in disruptive behaviour displayed by the experimental pupils before and after intervention, was not supported by the BSAG assessment, may be due to the understating of the scores of the experimental pupils at entry to the unit, as discussed previously.

In any event, both the Bristol Social Adjustment Guides and the Behaviour Checklist confirm that there are significant differences at the 0.05 level between the experimental boys and the control boys at the conclusion of the intervention. Given that this is so in respect of both the Bristol Social Adjustment Guides and the Behaviour Checklist, whilst significant difference between the experimental boys and control boys before intervention, was evident only in respect of the Bristol Social Adjustment Guides test, there is some evidence that behaviour change has taken place in respect of one group relative to the other.

Observation of scores achieved on the Behaviour Checklist test, indicates that the 'distance' between the control group of pupils and the experimental group of pupils, is the result of the higher scores (i.e. worsening behaviour) of the control group and the lower scores (i.e. improved behaviour) of the experimental group. This is supported by the fact
that observation of the raw BSAG scores for the control pupils tends to confirm that the significant change at the 0.2 level, for these pupils, is associated with worsening behaviour.
12. **Main Study Sub-Divided by Unit**

It is possible that the significant changes measured in the disruptive behaviour of some of the experimental pupils during the period of intervention, are not reflected in all of the three units involved in the study. It may be that pupils referred to one unit showed important changes in behaviour during the intervention whilst pupils referred to another unit, did not. In other words, it is feasible that the intervention is not consistently the same for all pupils, irrespective of unit. It is, therefore, relevant to sub-divide the sample of pupils into three groups according to the particular unit attended and to examine each resulting group of pupils for significance by t test.

In order to retain confidentiality, the units are described as Unit A, Unit B and Unit C.

Tabulated and diagrammatical comparisons of the mean scores of the groups of pupils who attended each unit are first shown before proceeding to an analysis of the results of t tests in respect of each separate unit.
Mean Scores

Pupils who had attended Unit A

N = 19 pairs

### BSAG Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL GROUP</td>
<td>23.474</td>
<td>25.789</td>
<td>2.315</td>
</tr>
<tr>
<td>EXPERIMENTAL GROUP</td>
<td>17.316</td>
<td>21.0</td>
<td>3.684</td>
</tr>
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</table>

### Behaviour Checklist Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL GROUP</td>
<td>46.789</td>
<td>46.526</td>
<td>0.263</td>
</tr>
<tr>
<td>EXPERIMENTAL GROUP</td>
<td>35.789</td>
<td>23.368</td>
<td>12.421</td>
</tr>
</tbody>
</table>

---

Control Group
Experimental Group

Before
After

---

Control Group
Experimental Group

Before
After
Mean Scores

Pupils who had attended Unit B

\[ N = 11 \] pairs

BSAG Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL GROUP</td>
<td>16.181</td>
<td>22.273</td>
<td>+6.092</td>
</tr>
<tr>
<td>EXPERIMENTAL GROUP</td>
<td>7.455</td>
<td>9.455</td>
<td>+2.0</td>
</tr>
</tbody>
</table>

Behaviour Checklist Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL GROUP</td>
<td>29.0</td>
<td>35.727</td>
<td>+6.727</td>
</tr>
<tr>
<td>EXPERIMENTAL GROUP</td>
<td>7.909</td>
<td>5.818</td>
<td>-2.091</td>
</tr>
</tbody>
</table>

![Graph of BSAG Mean Scores](image)

![Graph of Behaviour Checklist Mean Scores](image)
Mean Scores

Pupils who had attended Unit C

N = 15 pairs

BSAG Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL GROUP</td>
<td>16.6</td>
<td>14.733</td>
<td>-1.867</td>
</tr>
<tr>
<td>EXPERIMENTAL GROUP</td>
<td>14.667</td>
<td>12.2</td>
<td>-2.467</td>
</tr>
</tbody>
</table>

Behaviour Checklist Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL GROUP</td>
<td>35.8</td>
<td>31.533</td>
<td>-4.267</td>
</tr>
<tr>
<td>EXPERIMENTAL GROUP</td>
<td>29.267</td>
<td>17.667</td>
<td>-11.6</td>
</tr>
</tbody>
</table>
Analysis - Unit A

The sample of pupils who attended Unit A consisted of 19 pupils. Comparing the two groups of 19 relevant pupils i.e. the experimental pupils who attended Unit A and the matched group of 19 pupils comprising the control, the results of t tests were as follows:

Test - BSAG/1AU: Experimental pupils at entry to Unit A, assessed by Bristol Social Adjustment Guides and compared with the experimental pupils (i.e. themselves) at the conclusion of the intervention, assessed by Bristol Social Adjustment Guides.

Before: $\bar{x} = 17.316$  
SD = 5.722 

After: $\bar{x} = 21$  
SD = 9.931

Significantly different at 80% with df = 18.

Result - Accept Ho.

Test - BSAG/2AU: Control pupils at those point in time before and after intervention, matched to the pupils comprising the experimental pupils at Unit A, assessed by Bristol Social Adjustment Guides.
Before: $\bar{x} = 23.474$  
$SD = 6.090$  

After: $\bar{x} = 25.789$  
$SD = 7.634$  

Significantly different at 80%  
with df = 18.

Result - Accept Ho.

Test - BSAG/3AU: Experimental pupils at entry to Unit A, assessed by Bristol Social Adjustment Guides and compared with the control pupils at the same points in time, assessed by Bristol Social Adjustment Guides.

Exp: $\bar{x} = 17.316$  
$SD = 5.722$  

Control: $\bar{x} = 23.474$  
$SD = 6.090$  

Significantly different at 99%  
with df = 36.

Result - Reject $Ho \neq 0.05$.

Test - BSAG/4AU: Experimental pupils at the conclusion of the intervention by Unit A, assessed by Bristol Social Adjustment Guides and compared with the control pupils at the same points in time, assessed by Bristol Social Adjustment Guides.

Exp: $\bar{x} = 21$  
$SD = 9.931$  

Control: $\bar{x} = 25.789$  
$SD = 7.634$
Significantly different at 80% with df = 36.

Result - Accept Ho.

Test - BC/IAU: Experimental pupils at entry to Unit A, assessed by Behaviour Checklist and compared with the experimental pupils (i.e. themselves) at the conclusion of the intervention, assessed by Behaviour Checklist.

Before: $\bar{x} = 35.789$  After: $\bar{x} = 23.368$

$\text{SD} = 28.018$  $\text{SD} = 21.670$

Significantly different at 80% with df = 18.

Result - Accept Ho.

Test - BC/2AU: Control pupils at those points in time before and after intervention, matched to the pupils comprising the experimental pupils at Unit A, assessed by Behaviour Checklist.

Before: $\bar{x} = 46.789$  After: $\bar{x} = 46.526$

$\text{SD} = 27.661$  $\text{SD} = 28.817$

Not significantly different.

Result - Accept Ho.

Test - BC/3AU: Experimental pupils at entry to Unit

- 357 -
A, assessed by Behaviour Checklist and compared with the control pupils at the same points in time, assessed by Behaviour Checklist.

Exp: \( \bar{x} = 35.789 \) \hspace{1cm} Control: \( \bar{x} = 46.789 \)
\[ SD = 28.018 \hspace{1cm} SD = 27.661 \]

Not significantly different.
Result - Accept Ho.

Test - BC/4AU: Experimental pupils at the conclusion of the intervention by Unit A, assessed by Behaviour Checklist and compared with the control pupils at the same points in time, assessed by Behaviour Checklist.

Exp: \( \bar{x} = 23.368 \) \hspace{1cm} Control: \( \bar{x} = 46.526 \)
\[ SD = 21.670 \hspace{1cm} SD = 28.817 \]

Significantly different at 99% with \( df = 36 \).
Result - Reject Ho at 0.05.

**Discussion**

Few conclusions can be drawn from the tests at the 0.05 level of significance. If a less strict level of significance is accepted then it is perhaps worth
noting that the experimental group, before and after intervention, measured by the Bristol Social Adjustment Guides and Behaviour Checklist, in both cases showed significant difference at the 0.2 level. Consideration of the pupils' individual scores, however, showed the change to be in respect of worsening behaviour in the case of the Bristol Social Adjustment Guides test and improving behaviour in the case of the Behaviour Checklist test.

The fact that the experimental group of pupils compared with the control group of pupils at entry to Unit A, shows significant difference at the 0.05 level, on the basis of the Bristol Social Adjustment Guide, is somewhat surprising. It is just possible that the Bristol Social Adjustment Guides are more prone to under-rate the disruptive behaviour of the experimental pupils when completed by Unit teachers, than is the Behaviour Checklist. This could help to explain both of the above issues.

This is, of course, conjecture and all that can be said with any confidence is that there is evidence to support a contention that Unit A has effected behaviour improvement, on the basis of the result of the Behaviour Checklist scores. This is, however, not confirmed by the results of the Bristol Social Adjustment Guides.
Analysis - Unit B

The sample of pupils who attended Unit B consisted of 11 pupils. Comparing the two groups of 11 relevant pupils, i.e. the experimental pupils who attended Unit B and the matched group of 11 pupils comprising the control, the results of t tests were as follows:

Test - BSAG/1BU: Experimental pupils at entry to Unit B, assessed by Bristol Social Adjustment Guides and compared with the experimental pupils (i.e. themselves) at the conclusion of the intervention, assessed by Bristol Social Adjustment Guides.

Before: \( \bar{x} = 7.455 \)  
\( \text{SD} = 6.096 \)  

After: \( \bar{x} = 9.455 \)  
\( \text{SD} = 7.750 \)  

Not significantly different.  
Result - Accept Ho.

Test - BSAG/2BU: Control pupils at those points in time before and after intervention, matched to the pupils comprising the experimental pupils at Unit B, assessed by Bristol Social Adjustment Guides.

Before: \( \bar{x} = 16.181 \)  
\( \text{After: } \bar{x} = 22.273 \)  

- 360 -
SD = 6.336       SD = 7.581
Significantly different at 95%
with df = 10.
Result - Reject Ho \( \neq 0.5 \).

Test - BSAG/3BU: Experimental pupils at entry to Unit B, assessed by Bristol Social Adjustment Guides and compared with the control pupils at the same point in time, assessed by Bristol Social Adjustment Guides.

Exp: \( \bar{x} = 7.455 \)  Control: \( \bar{x} = 16.181 \)
SD = 6.096       SD = 6.336
Significantly different at 99%
with df = 20.
Result - Reject Ho \( \neq 0.05 \).

Test - BSAG/4BU: Experimental pupils at the conclusion of the intervention by Unit B, assessed by Bristol Social Adjustment Guides and compared with the control pupils at the same points in time, assessed by Bristol Social Adjustment Guides.

Exp: \( \bar{x} = 9.455 \)  Control: \( \bar{x} = 22.273 \)
SD = 7.750       SD = 7.581
Significantly different at 99.8%
with df = 20

Result - Reject Ho at 0.05.

Test - BC/1BU: Experimental pupils at entry to Unit B, assessed by Behaviour Checklist and compared with the experimental pupils (i.e. themselves) at the conclusion of the intervention, assessed by Behaviour Checklist.

Before: $\bar{x} = 7.909$  
After: $\bar{x} = 5.818$

SD = 5.248  
SD = 4.569

Significantly different at 80% with df = 10.

Result - Accept Ho.

Test - BC/2BU: Control pupils at those points in time before and after intervention, matched to the pupils comprising the experimental pupils at Unit B, assessed by Behaviour Checklist.

Before: $\bar{x} = 29$  
After: $\bar{x} = 35.727$

SD = 21.705  
SD = 26.178

Significantly different at 80% with df = 10

Result - Accept Ho.

Test - BC/3BU: Experimental pupils at entry to Unit
B, assessed by Behaviour Checklist and compared with the control pupils at the same points in time, assessed by Behaviour Checklist.

Exp: $\bar{x} = 7.909$  Control: $\bar{x} = 29$
SD = 5.248  SD = 21.705

Significantly different at 99% with df = 20.

Result - Reject Ho $\neq 0.05$.

Test - BC/4BU: Experimental pupils at the conclusion of Unit B, assessed by Behaviour Checklist and compared with the control pupils at the same points in time, assessed by Behaviour Checklist.

Exp: $\bar{x} = 5.818$  Control: $\bar{x} = 35.727$
SD = 4.569  SD = 26.178

Significantly different at 99.8% with df = 20.

Result - Reject Ho $\neq 0.05$.

Discussion

As with Unit A, discussed previously, a strict adherence to the level of significance adopted leaves little that can be said with any assurance about the
changes of behaviour affected during the period of the intervention of Unit B. It can be stated, however, that the control group, tested at times coinciding with before and after intervention, when measured by Bristol Social Adjustment Guides, showed significant change at the 0.05 level. Consideration of the pupils scores showed the change to be in respect of worsening behaviour. This is, therefore a point of note.

It is, also the case that the experimental group at the conclusion of intervention compared with the control group, measured by Bristol Social Adjustment Guides and Behaviour Checklist, in both cases showed significant difference at the 0.05 level.

Since the experimental group before intervention compared with the control group before intervention, measured by both tests, showed a significant difference at the 0.05 level, it would be hazardous to suggest that the experimental and control groups grew further apart in respect of behaviours displayed during the period of the intervention. It may, however, again be the case that the before-intervention tests administered to the experimental group understate the level of disruptive behaviour. In such circumstances it is possible that the change that has occurred in the behaviour of the experimental pupils is greater than measured. Some
support for the point is provided by the results of the Behaviour Checklist which shows a significant difference in the pre- and post-intervention behaviour at the 0.2 level for both the experimental and control pupils. Observation of the raw scores for these pupils indicates that the behaviour of the experimental pupils has improved whilst that of the control pupils has worsened.

**Analysis - Unit C**

The sample of pupils who attended Unit C consisted of 15 pupils. Comparing the two groups of 15 relevant pupils, i.e. the experimental pupils who attended Unit C and the matched group of 15 pupils comprising the control, the results of t tests were as follows:

Test - BSAG/ICU: Experimental pupils at entry to Unit C, assessed by Bristol Social Adjustment Guides and compared with the experimental pupils (i.e. themselves) at the conclusion of the intervention, assessed by Bristol Social Adjustment Guides.

Before: $\bar{x} = 14.667$  
SD = 8.154  

After: $\bar{x} = 12.2$  
SD = 6.959

Significantly different at 80% with df = 14.
Result - Accept Ho.

Test - BSAG/2CU:
Control pupils at those points in time before and after intervention, matched to the pupils comprising the experimental pupils at Unit C, assessed by Bristol Social Adjustment Guides.

Before: $\bar{x} = 16.6$  
$SD = 7.292$  

After: $\bar{x} = 14.733$  
$SD = 8.314$  

Not significantly different.
Result - Accept Ho.

Test - BSAG/3CU: Experimental pupils at entry to Unit C, assessed by Bristol Social Adjustment Guides and compared with the control pupils at the same points in time, assessed by Bristol Social Adjustment Guides.

Exp: $\bar{x} = 14.667$  
$SD = 8.154$  

Control: $\bar{x} = 16.6$  
$SD = 7.292$  

Not significantly different.
Result - Accept Ho.

Test - BSAG/4CU: Experimental pupils at the conclusion of the intervention by
Unit C, assessed by Bristol Social Adjustment Guides and compared with the control pupils at the same points in time, assessed by Bristol Social Adjustment Guides.

Exp: \( \bar{x} = 12.2 \)  
SD = 6.959

Control: \( \bar{x} = 14.733 \)  
SD = 8.314

Not significantly different.
Result - Accept Ho.

Test - BC/1CU: Experimental pupils at entry to Unit C, assessed by Behaviour Checklist and compared with the experimental pupils (i.e. themselves) at the conclusion of the intervention, assessed by Behaviour Checklist.

Before: \( \bar{x} = 29.267 \)  
SD = 26.052

After: \( \bar{x} = 17.667 \)  
SD = 12.557

Significantly different at 95% with df = 14.
Result - Reject Ho at 0.05.

Test - BC/2CU: Control pupils at those points in time before and after intervention, matched to the pupils comprising the experimental pupils at Unit C, assessed by Behaviour Checklist.
Before: $\bar{x} = 35.8$  
SD = 30.257

After: $\bar{x} = 31.533$
SD = 30.726

Not significantly different.
Result - Accept Ho.

Test - BC3CU: Experimental pupils at entry to Unit C, assessed by Behaviour Checklist and compared with the control pupils at the same points in time, assessed by Behaviour Checklist.

Exp: $\bar{x} = 29.267$  
SD = 26.052

Control: $\bar{x} = 35.8$
SD = 30.257

Not significantly different.
Result - Accept Ho.

Test - BC/4CU: Experimental pupils at the conclusion of the intervention by Unit C, assessed by Behaviour Checklist and compared with the control pupils at the same points in time assessed by Behaviour Checklist.

Exp: $\bar{x} = 17.667$  
SD = 12.557

Control: $\bar{x} = 31.533$
SD = 30.726

Significantly different at 80% with df = 28.
Result - Accept Ho.

Discussion

The only test result relating to Unit C which shows significant difference between groups at the 0.05 level refers to the Behaviour Checklist when used to compare the experimental pupils before and after the intervention. This is important since observation of the raw scores for these pupils confirms that scores are lower after the intervention, i.e. that behaviour has improved. The point is supported by the BSAG results, which at the lower level of significance of 0.2, confirm a change in the behaviour of the experimental pupils, when compared before and after intervention. Again, this can be shown to reflect an improvement in the behaviour of these pupils. No concomitant significant change is shown for the control pupils over the same period of time.

It is noteworthy, therefore, that the Behaviour Checklist shows a difference that is significant at the 0.2 level between the experimental pupils and the control pupils, post intervention, implying a change in behaviour of one group of pupils relative to the other.

It must be concluded that in consideration of the three units, evidence to suggest that one unit
succeeds notably better than another in producing behaviour improvement in the pupils attending that unit, is lacking. Even so, there is some evidence to suggest that the experimental pupils show behaviour gains, relative to the control pupils, in all three Units.
13. Main Study Sub-divided by Age

In order to consider the possibility that the age of a pupil may influence the extent to which behaviour is effected by attendance at an off-site special unit, it was decided to sub-divide the 45 pairs of pupils comprising the main study into three groups.

The sub-groups determined consisted of:

- those pupils under the age of 13 years at entry to the Unit.
- those pupils between 13 years and 14 years of age at entry to the Unit.
- those pupils aged over 14 years at entry to the Unit.

This particular grouping gave a relatively small range of age span within each group whilst providing groups of near equal sample size.

Tabulated and diagrammatical comparisons of the mean scores of the pupils within each of the above age groups are shown before proceeding to an analysis of the results of t tests in respect of each age group.
Mean Scores

Pupils aged under 13 years

N = 14 pairs

BSAG Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
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<td>22.429</td>
<td>22.857</td>
<td>+0.428</td>
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<tr>
<td>EXPERIMENTAL GROUP</td>
<td>18.071</td>
<td>16.429</td>
<td>-1.642</td>
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</table>

Behaviour Checklist Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL GROUP</td>
<td>32.429</td>
<td>33.714</td>
<td>+1.285</td>
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<tr>
<td>EXPERIMENTAL GROUP</td>
<td>38.00</td>
<td>17.571</td>
<td>-20.429</td>
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</tbody>
</table>
Mean Scores

Pupils aged 13 years to 14 years

N = 14 pairs

BSAG Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
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<tr>
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<tr>
<td>EXPERIMENTAL GROUP</td>
<td>11.5</td>
<td>15.357</td>
<td>+3.857</td>
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Behaviour Checklist Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
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</thead>
<tbody>
<tr>
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<td>41.357</td>
<td>34.964</td>
<td>-6.393</td>
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<tr>
<td>EXPERIMENTAL GROUP</td>
<td>22.286</td>
<td>21.857</td>
<td>-0.429</td>
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</tbody>
</table>
Mean Scores

Pupils aged over 14 years

N = 17 pairs

BSAG Mean Scores

<table>
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<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
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</thead>
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<tr>
<td>CONTROL GROUP</td>
<td>19.647</td>
<td>23.176</td>
<td>+3.529</td>
</tr>
<tr>
<td>EXPERIMENTAL GROUP</td>
<td>12.176</td>
<td>14.176</td>
<td>+2.0</td>
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</table>

Behaviour Checklist Mean Scores

<table>
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<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
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<tbody>
<tr>
<td>CONTROL GROUP</td>
<td>41.647</td>
<td>47.176</td>
<td>+5.529</td>
</tr>
</tbody>
</table>
Analysis - Pupils aged under 13 years

The sample of pupils who attended the units who were under 13 years of age at entry numbered 14. Comparing the two groups of 14 relevant pupils, i.e. the experimental pupils and the matched group of 14 pupils comprising the control, the results of t tests were as follows:

Test - BSAG/113: Experimental pupils aged under 13 years, assessed at entry to the Units by Bristol Social Adjustment Guides and compared with the experimental pupils (i.e. themselves) at the conclusion of the intervention, assessed by Bristol Social Adjustment Guides.

Before: $\bar{x} = 18.071$  After: $\bar{x} = 16.429$
SD = 8.031  SD = 8.006
Not significantly different.
Result - Accept Ho.

Test - BSAG/213: Control pupils at those points in time before and after intervention, matched to the pupils comprising the experimental pupils who were aged under 13 years on entry to the Units, assessed by Bristol Social
Adjustment Guides.

Before: $\bar{x} = 22.429$  After: $\bar{x} = 22.857$

$SD = 6.832$  $SD = 10.927$

Not significantly different

Result - Accept Ho.

Test - BSAG/313: Experimental pupils who were under 13 years of age, assessed at entry to the Units, by Bristol Social Adjustment Guides and compared with the control pupils at the same points in time, assessed by Bristol Social Adjustment Guides.

Exp: $\bar{x} = 18.071$  Control: $\bar{x} = 22.429$

$SD = 8.031$  $SD = 6.832$

Significantly different at 80% with df = 26.

Result - Accept Ho.

Test - BSAG/413: Experimental pupils who were under 13 years of age at entry to the Units, assessed at the conclusion of the intervention by Bristol Social Adjustment Guides and compared with the control pupils at the same points in time, assessed by Bristol Social Adjustment Guides.
Exp: $\bar{x} = 16.429$  Control: $\bar{x} = 22.857$

$SD = 8.006$  $SD = 10.927$

Significantly different at 90% with df = 26.

Result - Accept Ho.

Test - BC/113: Experimental pupils aged under 13 years, assessed at entry to the Units by Behaviour Checklist and compared with the experimental pupils (i.e. themselves), at the conclusion of the intervention, assessed by Behaviour Checklist.

Before: $\bar{x} = 38.00$  After: $\bar{x} = 17.571$

$SD = 31.175$  $SD = 16.543$

Significantly different at 95% with df = 13.

Result - Reject $Ho \neq 0.05$.

Test - BC/213: Control pupils at those points in times before and after intervention, matched to the pupils comprising the experimental pupils who were aged under 13 years on entry to the Units, assessed by Behaviour Checklist.
Before: $\bar{x} = 32.429$  
$SD = 15.564$

After: $\bar{x} = 33.714$  
$SD = 21.362$

Not significantly different.  
Result - Accept Ho.

Test - BC/313: Experimental pupils who were under 13 years of age, assessed at entry to the Units, by Behaviour Checklist and compared with the control pupils at the same points in time, assessed by Behaviour Checklist.

Exp: $\bar{x} = 38.00$  
$SD = 31.175$

Control: $\bar{x} = 32.429$  
$SD = 15.564$

Not significantly different.  
Result - Accept Ho.

Test - BC/413: Experimental pupils who were under 13 years of age at entry to the Units, assessed at the conclusion of the intervention by Behaviour Checklist and compared with the control pupils at the same points in time, assessed by Behaviour Checklist.

Exp: $\bar{x} = 17.571$  
$SD = 16.543$

Control: $\bar{x} = 33.714$  
$SD = 21.362$

Significantly different at 95%

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with df = 26.
Result - Reject Ho = 0.05.

**Discussion**

The results of the tests utilising the Bristol Social Adjustment Guides, provided no information regarding conclusive changes in behaviour for the experimental pupils comparative to the control pupils.

The results of the tests utilising the Behaviour Checklist, on the other hand, showed significant difference between the experimental pupils, before and after intervention, at the 0.05 level. The Behaviour Checklist also showed that significant difference is evident at the 0.05 level when the experimental pupils are compared with the control pupils at the termination of the intervention. Certainly relative change in behaviour is suggested.

Observation of the actual scores obtained by the experimental pupils on the Behaviour Checklist tests, indicated that a number of pupils secured improved scores.

Whilst, therefore, nothing of note, can be concluded from the results of the Bristol Social Adjustment Guides the results of the Behaviour Checklist may imply that the Units have served to improve the
behaviour of pupils under 13 year of age, during their period of stay in a Unit.

**Analysis - Pupils aged 13-14 years**

The sample of pupils who attended the units who were aged 13-14 years at entry numbered 14. Comparing the two groups of 14 relevant pupils, i.e. the experimental pupils and the matched group of 14 pupils comprising the control, the results of t tests were as follows:

**Test - BSAG/114:** Experimental pupils aged 13-14 years, assessed at entry to the Units by Bristol Social Adjustment Guides and compared with the experimental pupils (i.e. themselves) at the conclusion of the intervention, assessed by Bristol Social Adjustment Guides.

Before: \( \bar{x} = 11.5 \)  
After: \( \bar{x} = 15.357 \)  
SD = 5.474  
SD = 9.897

Not significantly different.  
Result - Accept Ho.

**Test - BSAG/214:** Control pupils at those points in time before and after intervention, matched to the pupils comprising the
experimental pupils who were aged 13-14 years on entry to the Units, assessed by Bristol Social Adjustment Guides.

Before: $\bar{x} = 17.357$  After: $\bar{x} = 20.143$

$SD = 5.665$  $SD = 7.149$

Significantly different at 95%
with df = 13.

Result - Reject $Ho \neq 0.05$.

Test - BSAG/314: Experimental pupils who were aged 13-14 years, assessed at entry to the Units by Bristol Social Adjustment Guides and compared with the control pupils at the same points in time, assessed by Bristol Social Adjustment Guides.

Exp: $\bar{x} = 11.5$  Control: $\bar{x} = 17.357$

$SD = 5.474$  $SD = 5.665$

Significantly different at 99%
with df = 26.

Result - Reject $Ho \neq 0.05$.

Test - BSAG/414: Experimental pupils who were aged 13-14 years at entry to the Units, assessed at the conclusion of the intervention, by Bristol Social
Adjustment Guides and compared with the control pupils at the same points in time, assessed by Bristol Social Adjustment Guides.

**Exp:** $\bar{x} = 15.357$  
$SD = 9.897$

**Control:** $\bar{x} = 20.143$  
$SD = 7.149$

Significantly different at 80% with df = 26.

Result - Accept Ho.

**Test - BC/114:** Experimental pupils aged 13 to 14 years, assessed at entry to the Units by Behaviour Checklist and compared with the experimental pupils (i.e. themselves) at the conclusion of the intervention, assessed by Behaviour Checklist.

Before: $\bar{x} = 22.286$  
$SD = 22.829$

After: $\bar{x} = 21.857$  
$SD = 21.494$

Not significantly different.

Result - Accept Ho.

**Test - BC/214:** Control pupils at those points in time before and after intervention, matched to the pupils comprising the experimental pupils who were aged 13 to 14 years on entry to the Units.
assessed by Behaviour Checklist.

Before: $\bar{x} = 41.357$  
After: $\bar{x} = 34.071$

$SD = 34.964$  
$SD = 20.387$

Not significantly different.

Result - Accept Ho.

Test - BC/314: Experimental pupils who were aged 13 to 14 years, assessed at entry to the Units by Behaviour Checklist and compared with the control pupils at the same points in time assessed by Behaviour Checklist.

Exp: $\bar{x} = 22.286$  
Control: $\bar{x} = 41.357$

$SD = 22.829$  
$SD = 34.964$

Significantly different at 90% with $df = 26$. 

Result - Accept Ho.

Test - BC/414: Experimental pupils who were aged 13 to 14 years at entry to the Units, assessed by Behaviour Checklist and compared with the control pupils at the same points in time, assessed by Behaviour Checklist.

Exp: $\bar{x} = 21.857$  
Control: $\bar{x} = 34.071$

$SD = 21.494$  
$SD = 20.387$
Significantly different at 80% with df = 26.
Result - Accept Ho.

Discussion

At the 0.05 level of significance, it is notable that the experimental pupils, when tested by the Bristol Social Adjustment Guides, are different at the point of the commencement of the intervention by the special unit. This may be due to the under-scoring of the experimental pupils. Certainly, the control pupils show a significant change in behaviour and scrutiny of the raw scores shows this to be a worsening in behaviour.

A comparison of the experimental and control pupils at the conclusion of the intervention, pointed up marginal differences between the two groups on both the Bristol Social Adjustment Guides test and Behaviour Checklist test, that are significant at the less stringent 0.2 level.

This, in itself, however, is insufficient to permit any conclusion to be drawn about the possible influence of the units in respect of producing behaviour change for those pupils in the 13-14 years old age group.
Analysis - Pupils Aged over 14 years

The sample of pupils who attended the units who were aged over 14 years at entry numbered 17. Comparing the two groups of 17 relevant pupils, i.e. the experimental pupils and the matched group of 17 pupils comprising the control, the results of t tests were as follows:

Test - BSAG/115: Experimental pupils aged over 14 years, assessed at entry to the Units by Bristol Social Adjustment Guides and compared with the experimental pupils (i.e. themselves) at the conclusion of the intervention, assessed by Bristol Social Adjustment Guides.

Before: $\bar{x} = 12.176$  
SD = 7.883  

After: $\bar{x} = 14.176$  
SD = 11.089  

Not significantly different.

Result - Accept Ho.

Test - BSAG/215: Control pupils at those points in time before and after intervention, matched to the pupils comprising the experimental pupils who were aged over 14 years on entry to the units, assessed by Bristol Social
Adjustment Guides.

Before: \( \bar{x} = 19.647 \)  After: \( \bar{x} = 23.176 \)
SD = 7.918  \hspace{1cm} SD = 9.192

Significantly different at 80%
with df = 16.

Result – Accept Ho.

Test - BSAG/315: Experimental pupils who were over 14 years of age, assessed at entry to the Units by Bristol Social Adjustment Guides and compared with the control pupils at the same points in time, assessed by Bristol Social Adjustment Guides.

Exp: \( \bar{x} = 12.176 \)  Control: \( \bar{x} = 19.647 \)
SD = 7.883  \hspace{1cm} SD = 7.918

Significantly different at 99%
with df = 32.

Result – Reject Ho \( \neq 0.05 \).

Test - BSAG/415: Experimental pupils who were over 14 years of age at entry to the Units, assessed at the conclusion of the intervention by Bristol Social Adjustment Guides and compared with the control pupils at the same points in time, assessed by Bristol Social Adjustment Guides.
Social Adjustment Guides.

Exp: $\bar{x} = 14.176$  Control: $\bar{x} = 23.176$

SD = 11.089  SD = 9.192

Significantly different at 98% with df = 32.

Result - Reject $H_0 \neq 0.05$.

Test - BC/115: Experimental pupils aged over 14 years, assessed at entry to the Units by Behaviour Checklist and compared with the experimental pupils (i.e. themselves) at the conclusion of the intervention, assessed by Behaviour Checklist.

Before: $\bar{x} = 21.294$  After: $\bar{x} = 12.235$

SD = 20.992  SD = 12.656

Significantly different at 90% with df = 16.

Result - Accept $H_0$.

Test - BC/215: Control pupils at those points in time before and after intervention, matched to the pupils comprising the experimental pupils who were aged over 14 years on entry to the Units, assessed by Behaviour Checklist.
Before: $\bar{x} = 41.647$  After: $\bar{x} = 47.176$

$SD = 29.312$  $SD = 38.815$

Not significantly different.

Result - Accept $H_0$.

Test - BC/315: Experimental pupils who were over 14 years of age, assessed at entry to the Units by Behaviour Checklist and compared with the control pupils at the same points in time, assessed by Behaviour Checklist.

Exp: $\bar{x} = 21.294$  Control: $\bar{x} = 41.647$

$SD = 20.992$  $SD = 29.312$

Significantly different at 95% with $df = 32$.

Result - Reject $H_0 \alpha = 0.05$.

Test - BC/415: Experimental pupils who were over 14 years of age at entry to the Unit, assessed by Behaviour Checklist and compared with the control pupils at the same points in time, assessed by Behaviour Checklist.

Exp: $\bar{x} = 12.235$  Control: $\bar{x} = 47.176$

$SD = 12.656$  $SD = 38.815$

Significantly different at 99.8% with $df = 32$.  

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Result - Reject Ho $\neq$ 0.05.

Discussion

It is notable that the Bristol Social Adjustment Guides and the Behaviour Checklist both produced results indicating significant difference at the 0.05 level between the experimental pupils and the control pupils before intervention and again after intervention.

It is again possible that the scores for experimental pupils prior to intervention understate the disruptive behaviours displayed by this group of pupils. If this is the case then the scores achieved by experimental pupils, comparative to control pupils, at the conclusion of the intervention, are notable since they indicate a significant difference between the groups at the 0.05 level. In short, this would imply that the two groups have moved further apart in respect of measured disruptive behaviours during the period of intervention.

This standpoint is supported by evidence from the test scores, when a reduced level of significance is accepted. Thus, the Behaviour Checklist when used to assess change in the behaviour of the experimental group during the period of attendance at an off-site special unit, showed difference that is significant
at the 0.1 level. Observation of the pupils' scores showed this to be an improvement in behaviour scores.

Again, the BSAG when used to assess change in the behaviour of the control group during the period of intervention, showed difference that is significant at the 0.2 level. Observation of the pupils' scores showed this to be a deterioration in behaviour scores.

It may be concluded, therefore, that there is some evidence to support the contention that for pupils over the age of 14 years at entry to an off-site special unit, disruptive behaviour improves during the period that the pupils spend at the unit.

Although conclusive evidence is lacking which would allow categorical statements to be made about the effectiveness of attendance at a unit by a given age group, there is the suggestion within the above statistical analyses that the age groups do respond differently to the intervention of a Unit. It would seem that the 13-14 year old age group of pupils show least signs of behaviour improvement over the period of attendance at a Unit. On the other hand, there is an indication that for those pupils who are over the age of 14 years, improvement in behaviour occurs over the period of Unit intervention. This may be an important point and raises some question about the
observation of Coubly and Harper (1981), cited previously, that a period spent at an Off-Site Special Unit is more effective in changing the behaviour of younger pupils than it is in changing the behaviour of older pupils. The matter would benefit from further assessment extending beyond the scope of the present study.

14. Main Study Sub-divided by length of stay in a Unit

It has been indicated previously that the significance of the length of time that a pupil spends in a Unit, in respect of effecting changes in the pupil's behaviour, is a complex issue. This is so because some pupils will leave school directly from a unit, whether behaviour has improved or not, whilst other pupils will terminate their stay at the unit to return to mainstream schooling precisely because behaviour has improved. It is, in these circumstances, difficult to determine that length of stay in a unit is a meaningful concept.

Nevertheless, having set out previously a criteria for determining 'termination of the period of intervention' in respect of each pupil, it is reasonable to see if length of stay defined in this way, bears any significant relationship to changes in behaviour for pupils who spend time attending an off-site special unit.
In order to consider the possibility that the length of stay that a pupil spends in a unit may influence the pupil's behaviour, it was decided to sub-divide the 45 pairs of pupils comprising the main study into three groups.

The sub-groups determined consisted of:

- those pupils who had spent under 6 months in a unit.

- those pupils who had spent between 6 months and 12 months in a unit.

- those pupils who had spent over 12 months in a unit.

This particular grouping gave a relatively small range of months spent in a unit within each group whilst providing groups approximating in sample size.

A tabulated and diagrammatical comparison of the mean scores of the groups of pupils who spent under 6 months, between 6 months and 12 months and over 12 months in a Unit, is first shown before proceeding to an analysis of the results of t tests.
Mean Scores

Pupils who had spent less than 6 months in a Unit

\[ N = 12 \] pairs

BSAG Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL GROUP</td>
<td>19.167</td>
<td>23.5</td>
<td>+4.333</td>
</tr>
<tr>
<td>EXPERIMENTAL GROUP</td>
<td>12.417</td>
<td>15.0</td>
<td>+2.583</td>
</tr>
</tbody>
</table>

Behaviour Checklist Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL GROUP</td>
<td>46.417</td>
<td>43.583</td>
<td>-2.834</td>
</tr>
<tr>
<td>EXPERIMENTAL GROUP</td>
<td>25.583</td>
<td>13.833</td>
<td>-11.75</td>
</tr>
</tbody>
</table>
Mean Scores

Pupils who had spent between 6 months and 12 months in a Unit

N = 16 pairs

BSAG Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL GROUP</td>
<td>18.875</td>
<td>18.438</td>
<td>-0.437</td>
</tr>
<tr>
<td>EXPERIMENTAL GROUP</td>
<td>12.438</td>
<td>13.375</td>
<td>+0.937</td>
</tr>
</tbody>
</table>

Behaviour Checklist Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL GROUP</td>
<td>35.688</td>
<td>37.188</td>
<td>+1.5</td>
</tr>
<tr>
<td>EXPERIMENTAL GROUP</td>
<td>19.75</td>
<td>16.313</td>
<td>-3.437</td>
</tr>
</tbody>
</table>

![Graph of BSAG Mean Scores]

![Graph of Behaviour Checklist Mean Scores]
Mean Scores

Pupils who had spent over 12 months in a Unit

N = 17 pairs

BSAG Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL GROUP</td>
<td>21.118</td>
<td>24.648</td>
<td>+3.53</td>
</tr>
<tr>
<td>EXPERIMENTAL GROUP</td>
<td>16.647</td>
<td>17.176</td>
<td>+0.529</td>
</tr>
</tbody>
</table>

Behaviour Checklist Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL GROUP</td>
<td>36.059</td>
<td>39.647</td>
<td>+3.588</td>
</tr>
<tr>
<td>EXPERIMENTAL GROUP</td>
<td>33.882</td>
<td>20.353</td>
<td>-13.529</td>
</tr>
</tbody>
</table>

![Graph showing BSAG Mean Scores for Control and Experimental Groups before and after treatment.](image1)

![Graph showing Behaviour Checklist Mean Scores for Control and Experimental Groups before and after treatment.](image2)
Analysis - Pupils who had spent less than 6 months in a Unit.

The sample of pupils who had attended the units for less than 6 months numbered 12. Comparing the two groups of 12 relevant pupils, i.e. the experimental pupils and the matched group of 12 pupils comprising the control, the results of t tests were as follows:

Test - BSAG/16M: Experimental pupils who had spent under 6 months at a Unit, assessed at entry by Bristol Social Adjustment Guides and compared with the experimental pupils (i.e. themselves) at the conclusion of the intervention, assessed by Bristol Social Adjustment Guides.

Before: \( \bar{x} = 12.417 \)  
SD = 6.898

After: \( \bar{x} = 15 \)  
SD = 9.849

Not significantly different.

Result - Accept Ho.

Test - BSAG/26M: Control pupils at those points in time before and after intervention, matched to the pupils comprising the experimental pupils who had spent under 6 months at a Unit, assessed by Bristol Social Adjustment Guides.
Before: $\bar{x} = 19.167$  After: $\bar{x} = 23.5$
\[SD = 6.617 \quad SD = 9.421\]

Significantly different at 98% with df = 11.

Result - Reject Ho $\approx 0.05$.

Test - BSAG/36M: Experimental pupils who had spent under 6 months at a Unit, assessed at entry by Bristol Social Adjustment Guides and compared with the control pupils at the same points in time, assessed by Bristol Social Adjustment Guides.

Exp: $\bar{x} = 12.47$  Control $\bar{x} = 19.167$
\[SD = 6.698 \quad SD = 6.517\]

Significantly different at 95% with df = 22.

Result - Reject Ho $\approx 0.05$.

Test - BSAG/46M: Experimental pupils who had spent under 6 months at a Unit, assessed at the conclusion of the intervention by Bristol Social Adjustment Guides and compared with the control pupils at the same points in time, assessed by Bristol Social Adjustment Guides.
Exp: $\bar{x} = 15$ Control: $\bar{x} = 23.5$
SD = 9.849 SD = 9.421
Significantly different at 95%
with df = 22.
Result - Reject Ho $\alpha = 0.05$.

Test - BC/16M: Experimental pupils who had spent
under 6 months at a Unit, assessed
at entry by Behaviour Checklist and
compared with the experimental
pupils (i.e. themselves) at the
conclusion of the intervention,
assessed by Behaviour Checklist.

Before: $\bar{x} = 25.583$ After: $\bar{x} = 13.833$
SD = 23.560 SD = 10.246
Significantly different at 80%
with df = 11.
Result - Accept Ho.

Test - BC/26M: Control pupils at those points in
time before and after intervention,
matched to the pupils comprising the
experimental pupils who had spent
under 6 months at a Unit, assessed
by Behaviour Checklist.

Before: $\bar{x} = 46.417$ After: $\bar{x} = 43.583$
Test - BC/36M: Experimental pupils who had spent under 6 months at a Unit, assessed at entry by Behaviour Checklist and compared with the control pupils at the same points in time, assessed by Behaviour Checklist.

Exp: $\bar{x} = 25.583$  Control: $\bar{x} = 46.417$

SD = 23.560  SD = 37.163

Significantly different at 80% with df = 22.

Result - Accept Ho.

Test - BC/46M: Experimental pupils who had spent under 6 months at a Unit, assessed at the conclusion of the intervention by Behaviour Checklist and compared with the control pupils at the same point in time, assessed by Behaviour Checklist.

Exp: $\bar{x} = 13.833$  Control: $\bar{x} = 43.583$

SD = 10.246  SD = 38.504

Significantly different at 98% with df = 22.

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Result - Reject Ho = 0.05.

Discussion

Little can be concluded with confidence other than that the Bristol Social Adjustment Guides and Behaviour Checklist agree that there is a significant difference between the experimental and control pupils at the 0.05 level at the conclusion of the intervention.

If, as suggested previously, the 'before-intervention' tests for the experimental pupils understate the extent of disruptive behaviours for these pupils, then the significant 'after-intervention' scores may show that the experimental and control pupils have grown in difference. In short, one group has changed relative to the other over the period of intervention.

There is, no evidence at the 0.05 level to confirm that the experimental pupils pupils have changed during the period of intervention. If a less stringent level of significance is accepted, it becomes apparent that some change is evident. The Behavior Checklist results indicate a significant change at the 0.2 level in the score of the experimental pupils before and after intervention. Since no change is evident in the scores of the
control pupils over the same period of time and since further, observation of the actual scores for the experimental pupils shows an improvement in scores, we may deduce a comparative improvement in behaviour for those pupils who attended the units for under 6 months, as measured by the Behaviour Checklist.

The Bristol Social Adjustment Guides scores offer some confirmation of the point since the before and after intervention scores for the control pupils show a significant change, at the 0.05 level. What is more, since observation of the actual scores shows a worsening of behaviour in respect of the control group of pupils, it is possible to offer the results of the Bristol Social Adjustment Guides tests in support of the results of the Behaviour Checklist tests.

**Analysis - Pupils who had spent between 6 months and 12 months in a Unit.**

The sample of pupils who had attended the units for between 6 months and 12 months numbered 16. Comparing the two groups of 16 relevant pupils, i.e. the experimental pupils and the matched group of 16 pupils comprising the control, the results of t tests were as follows:

Test - BSAG/111M: Experimental pupils who had spent
between 6 months and 12 months at a Unit, assessed at entry by Bristol Social Adjustment Guides and compared with the experimental pupils (i.e. themselves), at the conclusion of the intervention, assessed by Bristol Social Adjustment Guides.

Before: $\bar{x} = 12.438$  
       $SD = 6.928$  

After:  $\bar{x} = 13.375$  
        $SD = 9.545$

Not significantly different.  
Result - Accept Ho.

Test - BSAG/211M: Control pupils at those points in time before and after intervention, matched to the pupils comprising the experimental pupils who had spent between 6 months and 12 months in a unit, assessed by Bristol Social Adjustment Guides.

Before: $\bar{x} = 18.875$  
       $SD = 8.410$  

After:  $\bar{x} = 18.438$  
        $SD = 6.364$

Not significantly different.  
Result - Accept Ho.

Test - BSAG/311M: Experimental pupils who had spent between 6 months and 12 months in a
Unit, assessed at entry by Bristol Social Adjustment Guides and compared with the control pupils at the same points in time, assessed by Bristol Social Adjustment Guides.

Exp: \( \bar{X} = 12.438 \)  
Control: \( \bar{X} = 18.875 \)  
SD = 6.928  
SD = 8.410  

Not significantly different.  
Result - Accept Ho.

Test - BSAG/411M: Experimental pupils who had spent between 6 and 12 months at a Unit, assessed at the conclusion of the intervention by Bristol Social Adjustment Guides and compared with the control pupils at the same points in time, assessed by Bristol Social Adjustment Guides.

Exp: \( \bar{X} = 13.375 \)  
Control: \( \bar{X} = 18.438 \)  
SD = 9.545  
SD = 6.364  

Significantly different at 90% with df = 30.  
Result - Accept Ho.

Test - BC/111M: Experimental pupils who had spent between 6 and 12 months at a Unit,
assessed at entry by Behaviour Checklist and compared with the experimental pupils (i.e. themselves) at the conclusion of the intervention, assessed by Behaviour Checklist.

Before: $\bar{x} = 19.75$  
$SD = 25.133$  

After: $\bar{x} = 16.313$  
$SD = 21.271$  

Not significantly different.  
Result - Accept Ho.

Test - BC/211M: Control pupils at those points in time before and after intervention, matched to the pupils comprising the experimental pupils who had spent between 6 and 12 months at a Unit, assessed by Behaviour Checklist.

Before: $\bar{x} = 35.688$  
$SD = 22.259$  

After: $\bar{x} = 37.188$  
$SD = 30.198$  

Not significantly different.  
Result - Accept Ho.

Test - BC/311M: Experimental pupils who had spent between 6 and 12 months at a Unit, assessed at entry by Behaviour Checklist and compared with the
control pupils at the same points in time, assessed by Behaviour Checklist.

Exp: $\bar{x} = 19.75$  Control: $\bar{x} = 35.688$
SD = 25.133  SD = 22.259

Significantly different at 90% with df = 30.

Result - Accept Ho.

Test - BC/411M: Experimental pupils who had spent between 6 and 12 months at a Unit, assessed at the conclusion of the intervention by Behaviour Checklist and compared with the control pupils at the same points in time, assessed by Behaviour Checklist.

Exp: $\bar{x} = 16.313$  Control: $\bar{x} = 37.188$
SD = 21.271  SD = 30.198

Significantly different at 95% with df = 30.

Result - Reject $\text{Ho} \neq 0.05$.

Discussion

Whilst debate may be entered into concerning the possible underestimating of the scores of the
experimental pupils prior to the intervention, and of
the relative importance of after-intervention scores,
such debate is of little consequence unless it is
supported by evidence of change in the scores of the
experimental pupils or control pupils over the period
of the intervention. No such change in scores is
evident, for the experimental pupils or for the
control pupils as measured by the Bristol Social
Adjustment Guides. A significant difference at the
0.05 level, is however, discernible when the
experimental pupils and control pupils are compared,
by Behaviour Checklist test, at the conclusion of the
intervention.

There is, therefore some evidence to suggest that
behaviour change has taken place during the period of
intervention and observation of the individual scores
obtained on the Behaviour Checklist supports a
contention that this probably results from an
improvement in the scores of the experimental pupils.

In the absence of confirming evidence from other
related assessments, it is, however, hazardous to
base too much importance on the one single
significant result.

**Analysis - Pupils who had spent over 12 months in a**
**Unit.**
The sample of pupils who had attended the units for over 12 months numbered 17. Comparing the two groups of 17 relevant pupils, i.e. the experimental pupils and the matched group of 17 pupils comprising the control, the results of t tests were as follows:

Test - BSAG/112M: Experimental pupils who had spent over 12 months at a Unit, assessed at entry by Bristol Social Adjustment Guides and compared with the experimental pupils (i.e. themselves), at the conclusion of the intervention, assessed by Bristol Social Adjustment Guides.

Before: $\bar{x} = 16.647$  
SD = 8.359

After: $\bar{x} = 17.176$  
SD = 9.871

Not significantly different. 
Result - Accept Ho.

Test - BSAG/212M: Control pupils at those points in time before and after intervention, matched to the pupils comprising the experimental pupils who had spent over 12 months at a Unit, assessed by Bristol Social Adjustment Guides.

Before: $\bar{x} = 21.118$  
After: $\bar{x} = 24.648$  

- 407 -
SO = 6.229
SO = 10.415

Not significantly different.
Result - Accept Ho.

Test - BSAG/312M: Experimental pupils who had spent over 12 months at a Unit, assessed at entry by Bristol Social Adjustment Guides and compared with the control pupils at the same points in time, assessed by Bristol Social Adjustment Guides.

Exp: $\bar{X} = 16.647$  Control: $\bar{X} = 21.118$
SD = 8.359  SD = 6.229

Significantly different at 90%
with df = 32.
Result - Accept Ho.

Test - BSAG/412M: Experimental pupils who had spent over 12 months at a Unit, assessed at the conclusion of the intervention by Bristol Social Adjustment Guides and compared with the control pupils at the same points in time, assessed by Bristol Social Adjustment Guides.

Exp: $\bar{X} = 17.176$  Control: $\bar{X} = 24.648$
SD = 9.871  SD = 10.415
Significantly different at 95% with df = 32.

Result - Reject Ho = 0.05.

Test - BC/112M: Experimental pupils who had spent over 12 months at a Unit, assessed at entry by Behaviour Checklist and compared with the experimental pupils (i.e. themselves), at the conclusion of the intervention, assessed by Behaviour Checklist.

Before: $\bar{x} = 33.882$  
$SD = 27.321$

After: $\bar{x} = 20.353$
$SD = 16.894$

Significantly different at 90% with df = 16.

Result - Accept Ho.

Test - BC/212M: Control pupils at those points in time before and after intervention, matched to the pupils comprising the experimental pupils who had spent over 12 months at a Unit, assessed by Behaviour Checklist.

Before: $\bar{x} = 36.059$  
$SD = 24.771$

After: $\bar{x} = 39.647$
$SD = 28.033$

Not significantly different.

Result - Accept Ho.
Test - BC/312M: Experimental pupils who had spent over 12 months at a Unit, assessed at entry by Behaviour Checklist and compared with the control pupils at the same points in time, assessed by Behaviour Checklist.

Exp: $\bar{x} = 33.882$  Control: $\bar{x} = 36.059$  
SD = 27.321  SD = 24.771  
Not significantly different.  
Result - Accept Ho.

Test - BC/412M: Experimental pupils who had spent over 12 months at a Unit, assessed at the conclusion of the intervention by Behaviour Checklist and compared with the control pupils at the same points in time, assessed by Behaviour Checklist.

Exp: $\bar{x} = 20.353$  Control: $\bar{x} = 39.647$  
SD = 16.894  SD = 28.033  
Significantly different at 95% with df = 32.  
Result - Reject Ho $\alpha = 0.05$.

Discussion
When the results of the Bristol Social Adujustment Guides and Behaviour Checklist are considered together, the following issues are apparent.

The experimental and control pupils are not notably different when measured prior to intervention. The Bristol Social Adjustment Guides show a difference significant at the 0.1 level between experimental pupils and control pupils before intervention but as reiterated throughout, this may be due to an over-stating of the test results for the experimental pupils.

The Behaviour Checklist indicated a difference that is significant at the 0.1 level in the scores of the experimental pupils before and after intervention. Scrutiny of the individual scores of the experimental pupils shows this to be indicative of an improvement in behaviour as measured by the Behaviour Checklist.

The Bristol Social Adjustment Guides and Behaviour Checklist agreed that the experimental pupils and control pupils differ significantly at the 0.05 level when contrasted after intervention.

Whilst some of the levels of significance cited fall below the accepted level of 0.05, it remains that when the above test results were considered together, they suggested that the behaviour of the experimental
pupils who spent over 12 months at a unit, improved relative to the control pupils.

Of the three sub-samples considered, it is evident that those pupils who spent over 12 months in a Unit showed the most notable change in behaviour. It is possible that this is a point of some importance since, as stated previously, there is a length of duration for the intervention beyond which the Unit may be described as a containment establishment as opposed to a haven for pupils or a remedial facility.

It is difficult to say whether or not this change of concept has been reached at a duration of 12 months. It is however, interesting that behaviour change was more notable for those pupils who spent comparatively the longest time in the Unit. Indeed, it is not only interesting but perhaps also surprising. After all, pupils who are returned to mainstream schools after only a short stay in a Unit, are in general returned precisely because they are perceived to display improved behaviour. Some statistical support is, of course, given to the notion that pupils who spend less than 6 months in a Unit, gain in improved behaviour. Yet the above analyses lack the degree of emphasis that might have been expected in this respect. It is possible that this implies that the pupils who spend over 12 months in a Unit are drawing longer term benefits from the 'treatment' they receive. Certainly
it may be supposed that the benefit of 'treatment' will be more likely to be felt by pupils who remain in the Unit the longest. If this is the case then an image of the Unit as a centre for remedial treatment begins to emerge.

Given, however, the question raised throughout concerning the possible understating of some initial test scores and the possibility of arbitrariness in the cut-off points determining the sub-samples, it would be rash to read too much into the suggestion that pupils who spend more than 12 months in a Unit show the greatest behaviour gains. It might, however, be stated with greater confidence that pupils who spend between 6 months and 12 months in a Unit show the least notable behaviour gains.
### Summary of Results of 't' tests

<table>
<thead>
<tr>
<th>Sample</th>
<th>Sample Size</th>
<th>Type of 't' test</th>
<th>B.S.A.G. or Behaviour Checklist</th>
<th>Degrees of Freedom</th>
<th>Level of Significance</th>
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**N.B.** Before Intervention Assessments for the experimental pupils were completed by teachers from the Referring Schools.
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N.B. Before Intervention Assessments for the experimental pupils were completed by teachers from the Units.
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N.B. Before Intervention Assessments for the experimental pupils were completed by teachers from the Units.
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N.B. Before Intervention Assessments for the experimental pupils were completed by teachers from the Units.
### Length of Stay (Between 6 months and 12 months)

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N.B. Before Intervention Assessments for the experimental pupils were completed by teachers from the Units.
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<th>Length of Stay (Over 12 months)</th>
<th>Sample Size</th>
<th>Type of 't' test</th>
<th>B.S.A.G. or Behaviour Checklist</th>
<th>Degrees of Freedom</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Pupils Before and After Intervention</td>
<td>17</td>
<td>Correlated</td>
<td>B.S.A.G.</td>
<td>16</td>
<td>-</td>
</tr>
<tr>
<td>Control Pupils Before and After Intervention</td>
<td>17</td>
<td>Correlated</td>
<td>B.S.A.G.</td>
<td>16</td>
<td>-</td>
</tr>
<tr>
<td>Experimental and Control Pupils Before Intervention</td>
<td>17</td>
<td>Independent</td>
<td>B.S.A.G.</td>
<td>32</td>
<td>90%</td>
</tr>
<tr>
<td>Experimental and Control Pupils After Intervention</td>
<td>17</td>
<td>Independent</td>
<td>B.S.A.G.</td>
<td>32</td>
<td>95%</td>
</tr>
<tr>
<td>Experimental Pupils Before and After Intervention</td>
<td>17</td>
<td>Correlated</td>
<td>Behaviour Checklist</td>
<td>16</td>
<td>90%</td>
</tr>
<tr>
<td>Control Pupils Before and After Intervention</td>
<td>17</td>
<td>Correlated</td>
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<td>16</td>
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<td>32</td>
<td>95%</td>
</tr>
</tbody>
</table>

N.B. Before Intervention Assessments for the experimental pupils were completed by teachers from the Units.
16. Summary of Findings

Two different assessments were employed. The Bristol Social Adjustment Guides have been widely utilised over a period of more than a decade and attempts have been made to validate it. The Behaviour Checklist has had more restricted use and in the form in which it was modified for the present study has not previously been employed. It is interesting, therefore, that in a number of instances where the two assessments are used, the results of both assessments support a particular trend. Indeed, it may be said that where both assessments agree that changes in behaviour are significant at the 0.05 level, then due cognizance should be given to these results.

This is most notably the case in respect of the pilot study (N = 8 pairs of pupils) and that part of the Main Study where 'before-intervention' assessments for the experimental pupils were completed by teachers from the referring school (N = 14 pairs of pupils).

So long as the requirement is met that the 'before-intervention' assessment for the experimental pupils is completed by teachers from the referring schools (N = 22 pairs of pupils) then
it seems to follow that:

(i) The behaviour of the experimental pupils changes (improves) significantly over the period of the intervention.

(ii) The behaviour of the control pupils either does not change significantly or changes (deteriorates) significantly over the same period of time.

(iii) The behaviour of the experimental pupils is not significantly different from that of the control pupils, at the commencement of the intervention.

(iv) The behaviour of the experimental pupils is significantly different from that of the control pupils, at the conclusion of the intervention.

Given that careful attention has been allocated to ensuring that the pairs of experimental and control pupils are matched not only for behaviour but also for age, sex, home circumstances and local environment, and that the level of match has undergone some degree of objective confirmation, it is difficult to imagine that the variables coming to bear upon the experimental pupils compared with the
control pupils, are fundamentally different, except in so far as the experimental pupils have undergone a period of attendance at a Local Education Authority Off-Site Special Unit. The control pupils, on the other hand, have remained in the same school of origin from which the matched experimental pupils were extracted to be referred to an off-site special unit.

It is reasonable, therefore, to conclude that the Local Education Authority Off-Site Special Units utilised in the present study (N = 5, in two different L.E.A's), do exert a significant influence on those pupils referred to them because the pupils were deemed to be disruptive in school, in respect of producing improvements in the behaviour of those pupils, as assessed by two different measures of behaviour.

It is more difficult to draw firm conclusions from the interesting but less emphatic results of the tests for sub-samples of the study. This may, however, be the result of the fact that in the sub-samples, as in the Main Study (N = 45), assessments of the experimental pupils are carried out by teachers from the Units and not teachers from the referring schools.
17. Comments on the Research Model

It was initially intended that between 75 and 100 matched pairs of pupils should be included in the research programme. The fact that the pilot study was reduced to 8 matched pairs and the main study was reduced to 45 matched pairs was the result of:

i) the exclusion from the programme of any pupils who had been referred to the L.E.A. off-site special Units for any reason other than disruptive behaviour;

ii) a strict adherence to the established criteria for matching experimental pupils with suitable control pupils;

iii) the decision to limit the duration of the study to 20 months on the grounds that a longer stay in a Unit may imply a 'custodial' purpose for the Unit, in respect of the pupils concerned.

These are important issues and although the size of the sample was in consequence reduced, the quality of the closeness of match was improved accordingly (See Appendix V).

The nature of the research programme undertaken is such that the concept of perfectly matched pairs of experimental and control pupils is not attainable. Even so, criteria of match were established, which it
is suggested, constitute a satisfactory basis for the research model.

An attempt was made to match pairs of pupils on five criteria of age, sex, intelligence/academic attainment, social class/home background and behaviour.

In each case the control pupil was selected from the experimental pupil's year group. This meant that variation between the age of the experimental pupil and the age of the matched control pupil could theoretically be as much as 11 months. In practice the largest difference for a matched pair was 6.8 months and the average difference was 3.1 months.

Although it would have been desirable to match on the basis of intelligence where an IQ measure would have provided a 'measurable' difference in IQ score between the experimental pupil and the matched control pupil, this proved difficult because an IQ measure was not available for all control pupils. An IQ measure was available for some of the experimental pupils as also were measures of attainment, especially in respect of Arithmetic and Reading. A teacher's estimate of attainment, was also in all cases available. This was based on measures that differed between schools but which were the same for matched pairs of pupils, who of course, came from the
same school. It was decided, therefore, that:

i) Teachers' estimates of attainment should contribute to the matching process, supported by IQ, if this was available.

ii) Where an IQ score was not available for both experimental pupil and control pupil, then an Arithmetic Age and/or Reading Age was considered in support of the teacher's estimate.

Teachers were asked if the levels of intelligence and/or attainment of each of the pair of pupils, as indicated by the assessment processes used by the school, allowed them to be described as poor, below average, average, or above average. Only pairs of pupils described as belonging to the same category in this respect were included in the study. They were, however, only included if they also showed similarity in either IQ or Reading Age/Arithmetic Age. By similarity in IQ was meant no greater a difference than 10 points. In practice, there was no greater difference than 8 points. By similarity in reading age and arithmetic age, was meant no greater difference than one year in each case. In practice, there was no greater difference than 11 months in reading age and 10 months in arithmetic age.

Whilst this process departed from the initial intention to use intelligence as the criterion for
matching, it most probably produced an equally satisfactory, if not preferable, notion for similarity between matched pairs of pupils.

Consideration was given to the possibility of collecting additional information from both experimental and control pupils about the social class and neighbourhood background of the pupils. This was pursued at length and abandoned on the grounds that it was unlikely that suitable additional information could be acquired which would permit matching to be other than spurious.

Instead, it was decided that teachers' records would be used to consider all relevant aspects of social class origin and neighbourhood background. Whilst these records contained considerable variation of information, notable criteria which were available in all cases, were:

i) Home address (whether living on similar estate)
ii) Whether or not one-parent family.
iii) Whether or not father in gaol.
iv) Whether or not a recent separation of parents had occurred.

It was decided to confine matching to these four headings and to include matched pairs of pupils only so long as they matched on a similar basis in respect
of each of these items.

The limitations of this process as a means of matching for social class, are clear enough. The present writer remains of the view, however, that to attempt to produce a wider set of criteria would serve only to imply that social class as a variable could be held constant when this would certainly not be the case. In these circumstances, it is better to endeavour to hold constant those more limited facets of social background which can be reasonably assessed, than to mislead the reader.

Whatever other issues may be considered as relevant to the matching process, clearly similarity of the behaviour of experimental pupils and control pupils, is paramount. This raises an immediate point of difficulty since it may be argued that if both the experimental pupils and the matched control pupils display identical behaviour, then both pupils would be referred to an LEA off-site special unit for disruptive pupils.

In practice, this proved less of a problem than expected. Indeed, several instances were evident where a fine-line decision had been made that had led to one pupil being referred to the unit whilst the other pupils was retained in school. In one case, both had been referred to the Educational
Psychologist and only after considerable deliberation was one pupil returned to the school and the other to the unit.

The teacher's view that both the experimental pupils and control pupils displayed similar disruptive behaviours, both in type and extent, was accepted by the writer and checked for accuracy by means of the Behaviour Checklist, as described in the text.

In practice, use of the Checklist as a means of confirming the level of match, proved of limited value, for two main reasons:

i) A low score may indicate a poor match or it may indicate a good match of a pair of pupils who both display a small number of disruptive behaviours.

ii) More commonly, a low score will result if the Checklist is completed by a teacher who understates the extent of the disruptive behaviour displayed by one of the pupils. It is certainly the case that in the pilot study, where Behaviour Checklists for the experimental pupils were completed, prior to intervention, by teachers from the referring schools, scores are considerably higher than in the main study. This is similarly the case in the 30% sample where the Behaviour Checklists
were completed, prior to intervention, by teachers from the referring schools.

The fact that the Behaviour Checklist scores and the BSAG Scores are almost always notably higher when they are completed by teachers from the referring schools, as opposed to teachers from the Units, highlights the different view on the experimental pupils held by the two sets of teachers.

The importance of the thirty percent sample, where the 'before-intervention' assessment for the experimental pupils were completed by teachers from the referring schools, is thus stressed. It would appear, in retrospect, that greater value would have ensued had all 'before-intervention' assessments for the experimental pupils been completed by teachers from the referring schools. This might have allowed other conclusions to be drawn from the results of analysing the sub-samples on sex, age, Unit and length of stay in the Unit.

As it was, in those cases where the 'before-intervention' assessments for the experimental pupils were completed by teachers from the referring schools, the results of using the Bristol Social Adjustment Guides and Behaviour Checklist, confirm that change i.e. improvement, in behaviour has taken place for the experimental pupils
during the period of intervention by the Units. Given that both assessments, the BSAG and the Behaviour Checklist are shown to be statistically reliable and valid, the level of significance confirmed is most notable.

The use of student's 't' test as a means of considering the level of significance of the assessed changes in behaviour of the experimental pupils in relation to the control pupils, during the period of intervention by the unit, is justified on the following grounds:

i) The Correlated 't' test (for use where the same pupils are being compared before and after intervention) and the Independent 't' test (for use where different groups are being compared either before or after intervention), allow replication in respect of the pilot study, main study and all sub-samples.

ii) The two versions of the 't' test are relatively simple to use with the raw data in question.

In the light of the above statements about the research model, the conclusion that attendance at a LEA off-site special unit does improve pupil behaviour, may be accepted with reasonable confidence.
It is at this point, however, that a fundamental question must be raised about whether this tells us more about the unit or the referring school.

Although a concentrated effort has been made to keep constant those variables which affect each matched pair of experimental and control pupils, it is not in all cases known whether both pupils were at all times submitted to instruction by the same teachers, prior to the referral of the experimental pupil to an off-site special unit. Still more notably, it is not known if the control pupils continue to have all the same teachers following the establishment of the matching process. Indeed, it is likely that in many cases they do not.

Given that a recurring theme in the thesis suggests that for many pupils the unit may be seen as a haven for those pupils for whom the school of origin offered an unsatisfactory experience, the teaching staff of the referring school may well be a most significant variable.

Another attempt to evaluate Local Education Authority off-site special units for disruptive pupils would do well to endeavour to pursue further this important but sensitive issue.
THE PUPIL QUESTIONNAIRE

As indicated in the review of literature, there is evidence to suggest that the pupil's view on special off-site units may be telling.

A questionnaire was therefore devised on the basis of the information provided by Tattum (1982) and administered to the pupils present within the units forming the main body of the research programme, at one particular moment in time.

There would have been little value in trying to administer a similar questionnaire to the matched control pupils and this was not therefore attempted.

Neither was it felt practical to undertake any sort of before and after test. A 'snap-shot' approach was therefore deemed the most appropriate way in which a sample of pupils who passed through the units over the period of study could be tested for their views on the units.

Thirty one pupils were spread more or less evenly between the three units at the time, of the snapshot (9, 10 and 12 respectively) covering more or less the same age range, sex distribution and length of stay in the unit, as shown in the main study.
The tests were administered in circumstances where pupils were assured that unit staff would not see the results and where the pupils could afford to be honest without fear of embarrassment or repercussion.

The questionnaire was completed in groups, the pupils in a unit being brought together in one room to complete the questionnaire together, with supervision and direction through each question, separately, with the meaning of questions explained as necessary.

The need for honesty and frankness was stressed throughout.

Twenty questions, largely involving Yes, No or Don't Know answers, were included on the questionnaire, with results as follows.

In answer to the question, "Do you like being a pupil at the Unit?", 23 of 31 said yes. This seems to debunk the idea that the unit is a sinbin and suggests that something positive is taking place.

It may be of course that pupils consider the unit as a soft option compared with mainstream schooling and that this is the reason why so many pupils who have 'run foul of mainstream' prefer the unit. However, when the second question was asked, i.e. "Would you like to leave the unit and return to your previous school?", the pupils were
almost evenly split with 14 saying yes and 15 saying no. There is no evidence here of disillusionment with school in general, least of all the school of origin.

This is confirmed by the third question, because on the assumption that some pupils might wish to get away from the unit but would equally not wish to return to the school of origin where problems had occurred, the question was asked, "Would you like to leave the unit and go to a different school?" It seems notable that 20 said No and only 6 said Yes, with 5 Don't Knows.

The results of the three questions taken together seem to imply that pupils are not especially anxious to get away from school, they are not anxious to make a new start in a new school and find considerable satisfaction in the unit.

It is therefore worth proceeding further to see why these should be so.

Hargreaves (1967) had shown that pupils criticised mainstream teachers for being unfair and arbitrary in rule application. Littler (1983) also had raised the point. It is notable, therefore, that when the 31 pupils in the units were asked, "Do you think that the teachers at the unit treat you fairly?" a massive 28 said yes.

It might be possible for mainstream school teachers to
counter this by suggesting that the pupils had confused strictness with fairness and that in practice the unit teachers provided a soft system. Hence the answers to the fifth question are revealing. Pupils were asked, "Do you think that teachers at the unit are strict?" 14 said No but 11 said Yes with 6 undecided. There is in other words, no general consensus of 'softness'.

Asking pupils questions about their own progress in the unit is fraught with certain difficulties since pupils are not always in the best position to judge their own progress objectively. Indeed, they may so want to progress that they would respond to questions on progress positively, whether they had in reality progressed or not. Even so, given the evidence (Daines, 1981) that in general pupils referred to units do so against a background of academic failure, it is relevant to ask pupils if they feel that they have put right some of this sense of failure.

Hence question 6 asked, "Do you feel that you have benefitted as a result of being at the unit?" A substantial 22 said yes. Taking this further to ask more specific questions about progress, the trend through all answers is one of supporting the work of the unit, i.e.

Question 7, asked "Do you feel that your behaviour has improved?" 20 said Yes.
Similarly Question 8, asked, "Do you find the subjects you study to be interesting?" 18 said Yes and 8 said No.

Again Question 9, asked, "Do you have a say in what subjects are taught?" 5 only said Yes and 22 No.

Question 10, asked, "Do you feel that you are coping satisfactorily with your lessons at the unit?" A significant 25 said Yes and only 4 said No.

Question 11, asked, "Do you feel that you are able to do most of the things asked of you?" A notable 25 said Yes and only 2 said No.

Question 12, asked, "Do you feel that you have caught up on your lessons at the unit?" 18 said Yes, 6 said No and 7 said Don't Know.
This is an interesting set of answers to this battery of questions. The general concensus is that the pupils are not being presented with work outside of their capabilities, that they are coping and progressing and tasting some success. This may explain the view that they are happy in the unit and many pupils feel they would like to return to mainstream, where they can perhaps now cope better.

To say that the unit is not providing them with work beyond their means does not rule out the possibility that the unit may not be stretching them sufficiently. Question number 13 is therefore significant in asking, "Are you bored at the unit?" Although only 3 said they were always bored at the unit, 23 said that they were sometimes bored and only 5 said they were never bored. This may reflect the poor facilities of the unit or the lack of pupils' access to personal friends. Either way, it is a substantial level of boredom.

Question 14 asked "Do you ever play truant from the unit?" 7 pupils said Yes but 23 said No. Given that many of the pupils have a history of truancy and 23 answered question 13 by indicating some boredom, an unexpectedly high figure do not play truant. Again, it suggests at least some level of identification by the pupils with the values of the staff and the unit. This is confirmed in Question 15 which asks, "Would the teachers at the unit mind if you played truant?" 23
pupils said Yes, only 3 said No and 5 said Don't Know.

This is surely a switch from the mainstream where pupils have been shown to feel that they, being disruptive and difficult, are doing staff a favour by staying away from school (White, 1979). The fact that so many pupils in the units believe that staff mind whether they are there or not, may prove a key factor in determining the significance of the special off-site unit.

The next two questions endeavour to pursue this aspect a step further by probing staff attitudes to pupils, as perceived by the pupils. Question 16 asked, "Do teachers at the unit pick on you?" No pupils answered always, 15 answered sometimes and 16 answered never. Question 17 asked, "Do you feel that teachers at the unit treat you with respect?" 13 answered always, 16 sometimes and only 2 answered never.

These answers contrast notably with typical answers to such questions given by disruptive pupils in mainstream schools and it may well be that the above pupils experience an unusual level of respect and failure to be 'picked-on', in the unit.

Question 18 asked, "Can you do external examinations at the unit?" Since 7 answered Yes, it confirms that this facility is not lost to more able pupils referred from mainstream schools. Not surprisingly, 9 did not know and
it is difficult to say whether for the 14 who said No, this reflects an opportunity lost by being in the unit or not.

Questions 19 and 20 provided the pupils with an opportunity to make multiple comments about what they liked best in the unit and what they liked least

As with previous questions, answers provided positive support for the unit, i.e. 30 out of 31 said that they 'got on' with the teachers. Considering the track record of the pupils in this respect, this is surely notable. Pupils were much less emphatic about whether they enjoyed the subjects taught in the unit better than at their previous schools and 16 said they did not, whilst 14 said they did, a near 50/50 split. The majority of the pupils, 24 out of 29 answering, felt that the subjects studied would help them to get a job. On the subject of examinations, although 18 out of 29 answering felt that they liked being in the unit because they were spared having to do examinations, 11 did not and the issue does not therefore seem to be an especially significant one in determining whether the pupils are or are not happy in the unit.

Left to add to the list of things pupils liked about the units, 14 separate positive points were raised and these included the practical options/extras such as snooker, horseriding, child care instruction, lack of school
uniform, swimming, being picked up from school, the small size of the unit relative to the school, shorter day, easy to get on with teachers, the extent to which unit staff will help a pupil find employment.

In response to the request about what pupils liked least at the unit, pupils were evenly split on whether or not they missed their friends, 14 saying that they did and 14 saying that they did not. Almost all pupils in the units had substantial distances to travel to school to attend the unit - this must follow since there are only 3 units covering a large geographical area. Yet 10 of 30 answering felt that the distance was not an issue of significance. 20 highlighted the fact that it was a long way to come from home every day but few saw this as a major critical issue.

Given the freedom for pupils to make critical comments of their own choice, only 9 critical comments were made by the 31 pupils. They are therefore idiosyncratic but are nevertheless important and they are therefore listed in full.

- Have to stay in during breaks
- 'Given a row' by teacher
- Do not like Sums/news
- The work is too easy
- Do not like the boys
- Simply do not like it
Concluding Discussion

There was no significant difference in the answers given by pupils from different units. No attempt was, however, made to break the answers down by age, sex or length of stay in the unit otherwise the guarantees of confidentiality could not be given.

The over-all result is one of positive support for the units.

It is interesting that pupils saw themselves progressing academically since a sample test of reading ages at one unit (N = 15) showed all but one pupil to have a reading age below chronological age, with reading ages ranging from 7.1 years to 13.1 years (excluding the one pupil whose reading age exceeded chronological age) and chronological age ranging from 10.10 years to 15.7 years. The mean in each case was 10.7 years and 13.4 years respectively, and the standard deviation 2.003 and 1.576 respectively.

What is not known, is whether reading age had improved over the period of stay of pupils in the unit. This would however present a spurious measure since the unit staff
deemed an improvement in reading age as one measure of suitability for the termination of the intervention.

It remains interesting, however, that against this background, a substantial number of pupils deemed themselves to be coping, to be able to do most things asked of them and to have benefitted from spending a proportion of their schooling at an off-site special unit.
CONCLUSION

This thesis has been concerned to evaluate Local Education Authority Off-Site Special Units.

However, it became evident at an early stage in the progress of the thesis that it would be first necessary to consider a number of relevant and related issues before advancing to a consideration of evaluation criteria, procedures and processes. This was so, because the available literature intimated that there is ambivalence in the reasons stated by schools and Local Education Authorities for referring disruptive pupils to off-site special units and there is confusion surrounding the expectations placed upon units.

With this in mind, a comprehensive range of literature was reviewed in order to explore a broad expanse of considerations relevant to disruptive behaviour, which might bring clarity and understanding to the ambivalence and confusion.

The review of literature suggested that whilst maintaining primary regard for the pupil's reform and correction by referring him or her to an off-site special unit, schools and Local Education Authorities are in practice most concerned to ensure the removal of recalcitrant pupils in the best interests of the referring school. Either way, the decision to refer the
pupil to an off-site special unit tends to rest upon a pathological explanation of disruptive behaviour.

Indeed, the practice of involving the Educational Psychologist in the process of referring pupils to off-site special units - a practice which is automatic in some authorities - serves to reiterate the notion that the explanation of the problem resides essentially within the pupil and it is there that correction must be sought.

The review of literature suggests that this is probably a misconception.

Some of this misconception originates from the usually accepted definitions of disruptive behaviour, which tend to give the impression that pupils who display disruptive behaviour are either maladjusted or deviant.

Further misunderstanding results from the historical background against which units have developed. There has been no central policy and no clear philosophical standpoint other than the recognition that changes in the schools produced a situation where, whatever the causes of disruptive behaviour, schools were less able or willing to look after their disruptive pupils. Hence they needed somewhere to off-load them.

There has also been a lack of clarity about the line between special units and special education. This is not
too surprising so long as units are seen as places to which maladjusted and deviant pupils can be off-loaded.

Some Local Education Authorities have concentrated on tidying up this situation but without getting to grips with establishing a fundamental 'raison d'être' for the units.

The result is that it is not clear what the units are supposed to be doing and against what criteria, therefore, they can be evaluated.

Within the review of literature, a range of evaluation studies has been considered in an attempt to throw light on this point. Many such studies, are in the event, questionable, since they frequently use 'reintegration rates as a criterion for the success of the units. This presupposes that the units are in business to 'reform' and 'return' pupils and that the problem resides within the pupil.

Evaluation studies which use reintegration rates as a criterion for measuring the success of units tend, therefore to imply that where reintegration rates are low, critical comment must be made about the role and function of the unit. The question arises, however, 'Are reintegration rates low because units are ineffective or because the concept of reintegration represents an unreliable measure of the success of units?'.
The review of literature pursues this point by showing that schools in general may be inappropriate for some pupils who, therefore, become disaffected and respond with disruptive behaviour. For particular schools, this is even more true, whilst specific aspects of some schools, such as the curriculum and the way in which discipline is enforced, may cause pupils to become disaffected and disruptive.

This does not seem to be able to be explained away by the pupils background circumstances of social class or ethnic origin.

It seems, therefore, that pupils are referred to off-site units by schools and Local Education Authorities, who are first and foremost acting in the best interests of the school rather than the pupil, but who claim that referral would assist the pupil. Improved behaviour and reintegration is expected, although in fact the real seat of the problem may be the school and its procedures. It is not surprising, therefore, that pupils regress when they are returned to the situation which played a considerable part in the development of their initial problems.

The pupils themselves confirm that they find mainstream schools, especially particular aspects of some schools, as irrelevant to their needs and conducive to the
development of a disruptive response. By contrast, they claim that life within the unit has something to offer them.

In these circumstances, it is clear that successful long term reintegration does not offer a satisfactory criterion for evaluating off-site special units.

Even so, integration may for some pupils be desirable and the pupils themselves often indicate a wish to return to mainstream schools. Also, wherever they go on to from the unit will demand acceptable behaviour from them.

Hence, it seems reasonable to maintain that the off-site special unit is not doing its job satisfactorily unless it helps the pupil to improve his or her behaviour.

Measured improvement in behaviour has therefore, been deemed to constitute an acceptable evaluation criterion for off-site special units. Furthermore, if a control group of pupils who display disruptive behaviour but who are retained in school, is used, this allows behaviour change to be seen against the background environment in which the pupil finds himself. Thus, if a pupil in a unit shows a measured improvement in behaviour over a given period of time, whilst a matched pupil in a mainstream school does not, or shows a deterioration in behaviour over this same period of time, we may deduce that there is something about the regime of the unit
compared with the school, that is more conducive to behaviour improvement.

A methodological procedure relevant to the design of the present empirical study was thus developed from the literature reviewed. Against the backcloth of the diverse points raised within the review of literature, it was pertinent to seek information from Local Education Authorities about existing practices relating to the provision of off-site special units in general and most specifically about evaluation procedures that may have been employed by the Local Education Authority. A programme of written enquiries to 104 Authorities, followed by personal visits to a sample of 15 Authorities revealed a varied range of off-site provision but a notable lack of evaluation attempts. Indeed, with the exception of the Inner London Education Authority, no authorities have undertaken an objective and formalised evaluation exercise of off-site special units for disruptive and disaffected pupils. Even in the case of the Inner London Education Authority, the evaluation exercises had not included a controlled empirical study, although a Behaviour Checklist had been devised and utilised as a measure of disruptive behaviour.

Although this Behaviour Checklist had not been employed by the Inner London Education Authority in a 'before and after' study, reports by the ILEA on its potential as a measuring tool were sufficiently encouraging to cause the
present writer to consider its use within the forgoing empirical study. It was first examined by requesting all 15 Secondary School Head teachers within a single Local Education Authority to comment on the Behaviour Checklist and to suggest additions and amendments.

The resulting refined Behaviour Checklist, together, with the well tried Bristol Social Adjustment Guides, constituted the measuring tools for use in the present evaluation exercise.

The evaluation procedure, utilising these two measures, was thus established as a before and after intervention study to assess change in the disruptive behaviour of pupils referred to LEA off-site special units, compared and contrasted to matched control pupils who similarly showed disruptive behaviour but who had been retained in mainstream schools.

The criterion for evaluation was thus behaviour change reflecting improvement in disruptive behaviours displayed, as measured by the Behaviour Checklist and Bristol Social Adjustment Guides and irrespective of any continuation of improvement after return to mainstream school education.

Considerable pains were taken to ensure that the experimental pupils and the control pupils were well matched for age, sex, social background and geographical
environment, that pupils referred to the units for any purpose other than disruptive behaviour were excluded, and that the Behaviour Checklists and Bristol Social Adjustment Guides were accurately completed.

The validity and reliability of the Behaviour Checklist and Bristol Social Adjustment Guides were also assessed and confirmed as satisfactory for the purpose of the study.

The use of the Behaviour Checklist as a check upon the level of match of the pairs of pupils, proved unconvincing. However, as a measure of disruptive behaviour, employed in support of the Bristol Social Adjustment Guides, the Behaviour Checklist would seem to have served its purpose well.

A Pilot study employing the methodology outlined above was undertaken in one Local Education Authority, and although the sample was small, offered evidence to suggest that a significant improvement in behaviour was secured in respect of the experimental pupils during the period of intervention by the off-site special unit, compared with the matched control pupils who remained in the mainstream schools.

The results were sufficiently significant to justify the replication of the experimental model in another Education Authority over a longer period of time.
Hence the main study was established and involved 3 off-site special units and all pupils referred to these 3 units over a period of 2 years and for whom a reasonably matched control pupil could be identified. This reduced the sample size to 45 matched pairs of pupils. Although this was smaller than the intended population for the study, it represented a carefully matched sample of pupils for whom the criterion for referral was disruptive behaviour and not some other reason, such as persistent school refusal.

A crucial aspect of the testing procedure proved to reside in the fact that Behaviour Checklists and Bristol Social Adjustment Guides completed in respect of the experimental pupils by staff from the unit at the time of the pupil's entry to the unit, seemed to understate the level of disruptiveness, when compared with the views of teachers from the pupil's school of origin.

It is not surprising, irrespective of justification, that the teachers in mainstream schools who have, perhaps, been required to tolerate the disruptive behaviour of the experimental pupils prior to their referral to off-site special units, should feel predisposed to assess these disruptive pupils more rigorously than did the unit staff.

A sample of fourteen disruptive pupils referred to
off-site units was, therefore, tested shortly after entry to the units by both the unit staff and also by teachers from the schools of origin. By establishing the Null Hypothesis and utilising Students' t test, it was possible to state that for these experimental pupils tested by teachers from the schools of origin, a significant improvement in behaviour at the 0.05 level occurred during the period of intervention, which was not reflected in the control pupils over the same period of time. Indeed, measures for the control pupils who remained in mainstream school indicated a deterioration in disruptive behaviour.

Given that the 8 pairs of pupils who constituted the pilot study also satisfied the requirement that teachers from the schools of origin, as opposed to the teachers from the units completed the 'before intervention' Behaviour Checklists and BSAGs, it is reasonable to conclude that a total of 22 carefully matched pairs of pupils from 5 off-site special units in 2 Local Education Authorities confirm the conclusion that the behaviour of disruptive pupils is improved during a period of intervention by an LEA off-site special unit.

The implications for the work of the units and their position within the education provision of Local Education Authorities is plain enough.

The literature reviewed for this thesis has shown that
whilst Local Education Authority off-site special units tend to be comprehended as a confused mixture of punishment system, remedial system and containment facility, they may in reality be most accurately described as a haven for some pupils from the stresses and failures associated with an inappropriate school provision.

The results of the empirical study embodied within this thesis support this view and lead to the conclusion that when provided with an education environment within which they can gain some degree of successful attainment and feel wanted for their own sakes, then disruptive pupils will begin to display improved behaviour.

The pupils own views promote this standpoint. Indeed, a questionnaire administered at a given moment of time to all 31 pupils in attendance at the three off-site special units involved in the present study, produced firm support for the role of the unit, as they saw it. For these pupils, the value of the units resided in such matters as, 'they were happy there', 'the teachers treated them fairly'. They felt that they had benefitted at the unit and that their behaviour had improved. Many felt that they were coping satisfactorily with their lessons and were catching up on previous lost work. Most significantly they felt that they were treated with respect and that it mattered that they attended regularly.
In short, the pupils indicated positive support for the unit. Whilst this contrasts sharply with the attitude of disruptive pupils towards mainstream teachers and schools, many of the pupils in off-site special units indicated their wish to return to mainstream education.

This is perhaps not too surprising since pupils removed to off-site special units are separated from their friends and obliged to undertake their education in a unit as a result of a derogatory process implying failure and psychological disturbance. Whatever the reason, the desire to return to mainstream school would seem to reiterate the importance for these pupils of improving their behaviour during their period of stay at the unit. If their behaviour subsequently deteriorates after return to the mainstream school, this may tell us more about the school than about either the pupils or the units. Surely, if the units succeed in improving the behaviour of these pupils they have vindicated themselves and have shown that they serve a significant purpose within the armoury of Local Education Authorities.

The present thesis suggests that this is the case. The implications for the units and their work with disruptive pupils is important. The implications for schools and their conceptualisation of disruptive pupil behaviour may be even more important.
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Addendum


Appendix I

Checklist of Potentially Disruptive Classroom Behaviour
Evaluation of Special Provision for Disaffected Pupils

CHECKLIST OF POTENTIALLY DISRUPTIVE CLASSROOM BEHAVIOUR

The purpose of this information is to determine the nature and extent of disruptive behaviour displayed by named pupils. Information is being collected in respect of pupils referred to and accepted by a special unit for disaffected pupils and also in respect of a control group of pupils not so referred and accepted. It will form part of the data used in a long term evaluation of a special unit for disaffected pupils.

You are asked to please circle relevant behaviours in the appropriate column. Your decision will depend on a) whether or not the particular behaviour is disruptive in a given situation and b) the number of times you would expect an average child to do such a thing. Thus the 'zero' column reflects the behaviour of an average pupil. To circle a 'number one' would imply that the behaviour in question is displayed more often than a normal number of times, compared with the average pupil. To circle a 'number two' would imply that the behaviour in question is displayed much more often than a normal number of times compared with an average pupil.

Thank you very much for your co-operation.

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Telephone: (0269) 2713/3069.

Name of Teacher Completing the Checklist:.........................

School:----------------------------------------------------------

Date:-----------------------------------------------------------
Name of Pupil: ..................................  Sex: ................

School: ........................................

Form: ..............................  Age (last birthday): ............

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Average Frequency</th>
<th>More than Average Frequency</th>
<th>Much more often than Average Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. 1. Turns round in seat</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2. Rocks in chair</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3. Sits out of position in seat</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4. Fidgets</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5. Makes inappropriate gestures</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6. Pulls funny faces</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>7. Taps pencil/ruler</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>8. Taps hand on furniture</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>9. Stamps feet</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>10. Bangs furniture/desk lids</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>11. Displays symptoms of tiredness</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>12. Puts feet on chair/desk</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>B. 1. Shuffles chair</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2. Stands up</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3. Changes seat</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4. Moves from seat</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5. Walks about class</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6. Runs about class</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Behaviour</td>
<td>Average Frequency</td>
<td>More than Average Frequency</td>
<td>Much more often than Average Frequency</td>
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<td>-----------------------------------------------------</td>
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<tr>
<td>7. Opens/closes windows without permission</td>
<td>0</td>
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<tr>
<td>8. Leaves the classroom</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>9. Climbs on furniture / into cupboards</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>10. Lies on floor</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>11. Crawls on floor</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>12. Moves furniture</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>13. Throws pellets/paper</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>14. Throws equipment/books</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>15. Throws furniture</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>16. Adorns self with ink (tattooing, etc)</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>17. Locks doors, e.g. toilet doors</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>C. 1. Damages his/her own property</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2. Damages his/her own work</td>
<td>0</td>
<td>1</td>
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</tr>
<tr>
<td>3. Damages class furniture</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>4. Writes on furniture</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>5. Writes on wall</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6. Writes on noticeboard</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>7. Spits on floor</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>8. Complains unusually about classroom conditions</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Behaviour</td>
<td>Average Frequency</td>
<td>More than Average Frequency</td>
<td>Much more often than Average Frequency</td>
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<td>-----------------------------------------------</td>
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<tr>
<td>9. Laughs or giggles inappropriately</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>10. Shouts at random</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>11. Deliberately coughs/sneezes</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>12. Makes non-verbal noises</td>
<td>0</td>
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<td>2</td>
</tr>
<tr>
<td>13. Whistles</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>14. Sings/hums</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>15. Deliberately disarranges dress</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>16. Deliberately uses make-up in order to provoke</td>
<td>0</td>
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<td>2</td>
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<tr>
<td>17. Hurts himself/herself</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>18. Feigns illness</td>
<td>0</td>
<td>1</td>
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<tr>
<td>19. Induces vomiting</td>
<td>0</td>
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<tr>
<td>20. Feigns need to go to toilet</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>21. Arrives late</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>22. Loiters in corridors to harass staff</td>
<td>0</td>
<td>1</td>
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</tr>
<tr>
<td>23. Leaves coat on</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>24. Packs away early</td>
<td>0</td>
<td>1</td>
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<tr>
<td>25. Fails to leave classroom</td>
<td>0</td>
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<tr>
<td>26. Eats and/or drinks (i.e. inappropriately)</td>
<td>0</td>
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<td>2</td>
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<tr>
<td>27. Removes notices from noticeboard</td>
<td>0</td>
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<td>2</td>
</tr>
<tr>
<td>28. Plays with or strikes matches</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>Behaviour</td>
<td>Average Frequency</td>
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<tr>
<td>29. Plays with or smokes cigarettes</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>30. Plays with toys or other possessions, e.g. radio</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>31. Attracts attention of passers-by through windows</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>D. 1. Moves others' property</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2. Damages others' property</td>
<td>0</td>
<td>1</td>
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<tr>
<td>3. Takes others' property</td>
<td>0</td>
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<td>2</td>
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<tr>
<td>4. Interferes with other pupils' practical work</td>
<td>0</td>
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<td>2</td>
</tr>
<tr>
<td>5. Carries on distracting conversation with other pupil</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6. Shouts to other pupil</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>7. Verbally abuses other pupil</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>8. Taunts other pupil</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>9. Spits at other pupil</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>10. Obliquely assaults another pupil, e.g. drawing pin on chair</td>
<td>0</td>
<td>1</td>
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<tr>
<td>11. Mimics other pupil</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>12. Passes food/drink to other pupil</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>13. Strikes with hand other pupil</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>Behaviour</td>
<td>Average Frequency</td>
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<tr>
<td>14. Strikes with weapon other pupil</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>15. Pokes other pupil</td>
<td>0</td>
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<tr>
<td>16. Kicks other pupil</td>
<td>0</td>
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<td>2</td>
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<tr>
<td>17. Pushes other pupil</td>
<td>0</td>
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<td>2</td>
</tr>
<tr>
<td>18. Makes sexual advances to opposite sex</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>19. Trips other pupil</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>20. Bites other pupil</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>21. Scratches other pupil</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>22. Pinches other pupil</td>
<td>0</td>
<td>1</td>
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</tr>
<tr>
<td>23. Strangles other pupil</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>24. Clings to other pupil</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>25. Verbally threatens other pupil</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>26. Physically threatens other pupil</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>27. Contaminates others' food</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

E. 1. Fails to bring equipment          | 0                 | 1                           | 2                                      |

2. Fails to bring correct book to lesson | 0                 | 1                           | 2                                      |

3. Fails to do homework                 | 0                 | 1                           | 2                                      |

4. Fails to do punishment work/ attend detention | 0 | 1 | 2 |
<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Average Frequency</th>
<th>More than Average Frequency</th>
<th>Much more often than Average Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Openly refuses to do punishment work /attend detention (i.e. in front of other pupils)</td>
<td>0 1 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Carries on distracting conversation with teacher</td>
<td>0 1 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Calls out to teacher</td>
<td>0 1 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Shouts at teacher</td>
<td>0 1 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Asks teacher offensive questions</td>
<td>0 1 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Mimics teacher</td>
<td>0 1 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Yawns and displays boredom</td>
<td>0 1 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Verbally abuses teacher under breath</td>
<td>0 1 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Verbally abuses teacher directly</td>
<td>0 1 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Interferes with teacher's property</td>
<td>0 1 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Clings to teacher</td>
<td>0 1 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Assaults teacher obliquely, e.g. practical jokes</td>
<td>0 1 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Assaults teacher directly</td>
<td>0 1 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Verbally threatens teacher</td>
<td>0 1 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Physically threatens teacher</td>
<td>0 1 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Silently fails to follow teacher's instructions</td>
<td>0 1 2</td>
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<td></td>
</tr>
<tr>
<td>21. Silently refuses to attempt to work</td>
<td>0 1 2</td>
<td></td>
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<tr>
<td>Behaviour</td>
<td>Average Frequency</td>
<td>More than Average Frequency</td>
<td>Much more often than Average Frequency</td>
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<tr>
<td>22. Refuses to enter classroom</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>23. Refuses to leave room when instructed e.g. because of misbehaviour</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

F. Any others please specify
Appendix II

Bristol Social Adjustment Guides No. 1

The Child in School - Boy

The equivalent and similar Guide for Girls was used in this study as relevant.
**THE CHILD IN SCHOOL – BOY**

For the observation of day-school children, 5 - 16 years

prepared by D H Stott and N C Marston

The object of this Guide is to give a picture of the child's behaviour and to help in the detection of emotional instability.

**METHOD OF USE**

Underline in ink the phrases which describe the child's behaviour or attitudes over the past month or so. More than one item may be underlined in each paragraph, but do not underline any unless definitely true of the child. Add any remarks necessary beside the underlining, or at the end of the Guide. Where an item seems inappropriate because of age, etc., it can be ignored. If nothing is applicable, mark 'n.n.' (nothing noticeable). Do not bother to rule underlinings.

### Interaction with Teacher

<table>
<thead>
<tr>
<th>Phrases</th>
<th>Underlining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wants to be noticed / hails teacher loudly / greets normally / can be surly / never thinks of greeting / is too unaware of people to greet / n.n.</td>
<td></td>
</tr>
</tbody>
</table>

### Helping teacher with jobs:

<table>
<thead>
<tr>
<th>Phrases</th>
<th>Underlining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always eager or willing / presses for jobs but doesn't do them properly / never offers but pleased if asked / will help unless he is in a bad mood / cannot bring himself to be that sociable / n.n.</td>
<td></td>
</tr>
</tbody>
</table>

### Answering questions:

<table>
<thead>
<tr>
<th>Phrases</th>
<th>Underlining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always ready to answer / will answer except when in one of his bad moods / not shy but never volunteers an answer / gets confused and tongue-tied / shouts out or waves arm before he has had time to think / n.n.</td>
<td></td>
</tr>
</tbody>
</table>

### Asking teacher's help:

<table>
<thead>
<tr>
<th>Phrases</th>
<th>Underlining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constantly seeks help when he could manage by himself / seeks help only when necessary; seldom needs help / too shy to ask / not shy but never comes for help / too lacking in energy to bother / tries to argue against teacher / n.n.</td>
<td></td>
</tr>
</tbody>
</table>

### Talking with teacher:

<table>
<thead>
<tr>
<th>Phrases</th>
<th>Underlining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward (opens conversation) / over-talkative, tires with constant chatter / normally talkative / avoids teacher but talks to other children / chats only when alone with teacher / inclined to be moody / difficult to get a word out of him / distant. never wants to talk.</td>
<td></td>
</tr>
</tbody>
</table>

### Desire for approval or attention:

<table>
<thead>
<tr>
<th>Phrases</th>
<th>Underlining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unconcerned about approval or disapproval / appreciates praise / seems to go out of his way to earn disapproval / n.n.</td>
<td></td>
</tr>
<tr>
<td>Gets up to all kinds of tricks to gain attention / brings objects he has found even though not really lost / wants adult interest but can't put himself forward / keeps a suspicious distance / appreciates attention / n.n.</td>
<td></td>
</tr>
</tbody>
</table>

### General manner with teacher:

<table>
<thead>
<tr>
<th>Phrases</th>
<th>Underlining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural, smiles readily / over-friendly / shy but would like to be friendly / avoids contacts both with teacher and other children / sometimes in a bad mood / couldn't care whether teacher sees his work or not / quite cut off from people, you can't get near him as a person.</td>
<td></td>
</tr>
<tr>
<td>Liking for sympathy:</td>
<td>Doesn't make unnecessary fuss / likes sympathy but reluctant to ask; never appeals to adult even when hurt or wronged; never makes any sort of social relationship good or bad / n.n.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Classroom behaviour:</td>
<td>Too timid to be any trouble / too lethargic to be troublesome / generally well-behaved / misbehaves when teacher is engaged with others / openly does things he knows are wrong in front of teacher.</td>
</tr>
<tr>
<td>Truthfulness:</td>
<td>Always or nearly always truthful / tells fantastic tales / lies from timidity / lies without any compunction.</td>
</tr>
<tr>
<td>Response to correction:</td>
<td>Behaves better / responds momentarily but it doesn't last for long / too restless and overactive to heed even for a moment / becomes antagonistic / resentful muttering or expression for a moment or two / bears a grudge, always regards punishment as unfair / n.n.</td>
</tr>
</tbody>
</table>

**School Work**

<table>
<thead>
<tr>
<th>Paying attention in class:</th>
<th>Attends to anything but his work (talks, gazes around, plays with things) / so quiet you don't really know if he is following or not / apathetic, 'just sits' / you can't get his attention, 'lives in another world' / on the whole attends well.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working by himself:</td>
<td>Works steadily / unmotivated, has no energy / has unco-operative moods / never gets down to any solid work (flips over pages of book without reading it, etc.) / not restless but works only when watched or compelled.</td>
</tr>
<tr>
<td>Manual tasks or free activity:</td>
<td>Seems afraid to begin / difficult to stimulate, lacks physical energy / never really gets down to job and soon switches to something else / invents silly ways of doing things / may spoil his work purposely / sticks to job.</td>
</tr>
<tr>
<td>Facing new learning tasks:</td>
<td>Will be cautious at first but has a try / has not the confidence to try anything difficult / likes the challenge of something difficult / has a hit-and-miss approach to every problem shows complete indifference / n.n.</td>
</tr>
</tbody>
</table>

**Games and Play**

<table>
<thead>
<tr>
<th>Team games:</th>
<th>Plays steadily and keenly; with great energy / inclined to fool around / has to be encouraged to take part / always sluggish, lethargic / remains aloof in a world of his own / n.n.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bad loser (creates a disturbance when game goes against him) / bad sportsman (plays for himself only, cheats, fouls) / timid, poor spirited; can't let himself go / fits in well with team / n.n.</td>
</tr>
<tr>
<td>Informal play:</td>
<td>Plays childish games for his age / plays sensibly / healthily noisy and boisterous / tries to dominate and won't co-operate when he can't get his own way / starts off others in scrapping and rough play, disturbs others' games / shrinks from active play / has his own special solitary activity / n.n.</td>
</tr>
</tbody>
</table>
Attitudes to Other Children

Companionship:
- Good mixer / associates with one other child only and ignores the rest /
  distant, ignores others / sometimes wanders off alone.
- Mixes mostly with unsettled types / tries to buy favour with others /
  can never keep a friend long (tries to pal up with newcomers) /
  misuses companionship to show off or dominate / n.n.

Ways with other children:
- Squabbles, makes insulting remarks / shows off (clowns, strikes silly attitudes, mimics) / gets on well with others; generally kind, helpful /
  spiteful to weaker children when he thinks he is unobserved /
  tells on others to try to gain teacher's favour / n.n.

Physical courage:
- Too timid to stand up for himself or even to get involved in an argument /
  can stand up for himself / flies into a temper if provoked /
  attacks other children viciously / foolish or dangerous pranks when with a gang /
  very jumpy and easily scared / n.n.

Standing in line:
- Behaves in a well-disciplined manner / is often the centre of a disturbance /
  lets the more forward push ahead of him / tries to push in front of small children / n.n.

Personal Ways

Attendance:
- Good / frequently absent for day or half-day / has had long absences /
  has been known to play truant / parent condones absences, malingering, etc. /
  stays away to help parent.

Belongings:
- Looks after his things / careless, often loses or forgets books /
  destructive, defaces with scribbling / n.n.

Sitting at desk:
- Sits lifelessly most of the time / sits quietly and meekly /
  twists about in his seat, slips on to floor, climbs about on desk, etc. /
  doesn't seem to understand that he should keep in his seat /
  slumps, lolls about / sits in a sensible way.

Nervous habits, fidgets, etc.:
- Constantly restless (raps with pencil or ruler, shuffles with his feet, changes position) /
  makes aimless movements with his hands / has unwilled twitches, jerks / bites nails badly /
  sits reasonably still.

Other people's belongings:
- Borrows books from desk without permission / snatches things from other children /
  has stolen within the school in an underhand, cunning way /
  has stolen in a way that he would be bound to be found out /
  has always respected the property of others / n.n.

Other deviant behaviour:
- Damage to public property (windows, trees, fences, public gardens) /
  damage to personal property (cars, delivery vehicles, occupied houses, private gardens, teachers' or workmen's belongings) / follower in mischief /
  uses bad language which he knows will be disapproved of / n.n.
Physique

General health: Frequent colds, tonsillitis, coughs; running nose; mouth breather; poor breathing; wheezy; asthmatic; easily winded; skin troubles; sores; complains of tummy aches, feeling ill or sick; is sometimes sick; headaches; bad turns; goes very pale; fits; nose-bleeding; sore, red eyes; very cold hands; running, infected ears; good health.

Physical defects: Bad eyesight (wears or should wear glasses); squint; bulging eyes; poor hearing; clumsy, gawky (poor co-ordination); contorted features (face screwed up on one side, eyes half closed, etc.); holds body or limb in unnatural posture.

Speech: Stutters, stammers, can’t get the words out; thick, mumbling, inaudible; jumbled; incoherent rambling chatter; babyish (mispronounces simple words); n.n.

Size: Tall for age; ordinary; small; unusually small. Very fat; very thin; n.n.

Physical appearance: Attractive; not so attractive as most; looks undernourished; has some abnormal feature; n.n.

School Achievement

Classwork standard (for age): Reading (English): Good; average; poor; cannot read.
Arithmetic (Maths): Good; average; poor; completely incompetent.

Anything special about this child which is not covered in the form:

Summary, recommendations; comments:
Appendix III

Questionnaire to be Completed by Pupils at Special Units
PUPIL SELF MEASURE

Questionnaire to be completed by Pupils at Special Units

Please answer each of the following questions by placing a tick in the most appropriate box.

1. Do you like being a pupil at the Unit?  
   - Yes  
   - No  
   - Don't know

2. Would you like to leave the Unit and return to your previous school?  
   - Yes  
   - No  
   - Don't know

3. Would you like to leave the Unit and go to a different school?  
   - Yes  
   - No  
   - Don't know

4. Do you think that the teachers at the Unit treat you fairly?  
   - Yes  
   - No  
   - Don't know

5. Do you think that the teachers at the Unit are strict?  
   - Yes  
   - No  
   - Don't know

6. Do you feel that you have benefitted as a result of being at the Unit?  
   - Yes  
   - No  
   - Don't know
7. Do you feel that your behaviour has improved since you came to the Unit?  
   Yes ☐ No ☐ Don't know ☐

8. Do you find the subjects you study at the Unit to be interesting?  
   Yes ☐ No ☐ Don't know ☐

9. Do you have a say in what subjects you are taught?  
   Yes ☐ No ☐ Don't know ☐

10. Do you feel that you are coping satisfactorily with your lessons at the Unit?  
    Yes ☐ No ☐ Don't know ☐

11. Are you able to do most of the lessons, sums and other things asked of you at the Unit?  
    Yes ☐ No ☐ Don't know ☐

12. Do you feel that you have 'caught-up' on your lessons at the Unit?  
    Yes ☐ No ☐ Don't know ☐

13. Are you bored at the Unit?  
    Yes ☐ No ☐ Don't know ☐
14. Do you ever play truant from the Unit?  
   Yes [ ]  No [ ]  Don't know [ ]
15. Would the teachers at the Unit mind if you played truant?  
   Yes [ ]  No [ ]  Don't know [ ]
16. Do teachers at the Unit pick on you?  
   Always [ ]  Sometimes [ ]  Never [ ]
17. Do you feel that teachers at the Unit treat you with respect?  
   Always [ ]  Sometimes [ ]  Never [ ]
18. Can you do 'external examinations' at the Unit, i.e. CSE, 'O' level GCE, etc.  
   Yes [ ]  No [ ]  Don't know [ ]
19. What do you like best at the Unit? Tick as many boxes as you wish.  
   No [ ]  Yes [ ]  I get on with the teachers.  
   I enjoy the subjects better than at my previous school.  
   The subjects will help me to get a job.  
   I do not have to do examinations.  
   I feel that I am succeeding in my lessons.
Is there anything else you like about the Unit?

.............................................................
.............................................................
.............................................................

20. What do you like least at the Unit?
(Tick as many boxes as you wish).

No  Yes

☐ ☐ I miss my school friends.

☐ ☐ It is a long way to come from home every day.

Is there anything else you dislike about the Unit?

.............................................................
.............................................................
.............................................................

K. T. Littler,
June 1987.
A Definition of Disruptive Behaviour as Employed in the Present Study
A Definition of Disruptive Behaviour as Employed in the Present Study

It is clear that it is possible to approach an understanding of what constitutes disruptive behaviour from a number of different standpoints. That there is some problem in defining the term is no doubt the case and Frude and Gault (1984) provide considerable evidence of the range of possible approaches. It is refreshing that a range of possible definitions and explanations have been advanced and that the established presumption that all blame must fall upon the pupil, is being questioned.

For the purpose of the present study, as useful as the discussion may be in gaining understanding of a complex phenomenon, none of the definitions advanced provide a satisfactory means by which the disruptive pupil may be identified and examined. Hence a further working definition must be advanced. For the purpose of this research project a disruptive pupil is one who attends school regularly but whose behaviour, for whatever reason or cause, is unacceptable to some teachers some of the time.

Thus the persistent absentee is excluded from the category and no expectation is established to presuppose that the disruptive pupil be disruptive all of the time and in the presence of all teachers. What is more, no assumption is made about the type of behaviours displayed. Indeed, the Behaviour Checklist (see Appendix I) which finally resulted from
comments made by Head Teachers about what constituted disruptive behaviour, is lengthy and includes both minor and major misdemeanours. What is assumed, however, is that a disruptive pupil can be defined as such on the basis of what may be a limited range of misdemeanours and judged by any number of teachers, or just one teacher, on grounds that in the view of that teacher or teachers, the pupil's behaviour is unacceptable.

This definition may depart in a serious way from those outlined above. Since, however, the present study must proceed to an empirical examination of disruptive pupils, it is necessary to establish a definition usable to this end.

It is by no means clear that the definitions, approaches and explanations of disruptive behaviour, outlined in the foregoing review of literature, are satisfactory to this end.
Appendix V

Table of Matched Pairs of Experimental Pupils and Control Pupils
Table of Matched Pairs of Experimental Pupils and Control Pupils

(1) Pilot Study

<table>
<thead>
<tr>
<th>Pupil Pair No.</th>
<th>Sex</th>
<th>Age (years and months)</th>
<th>Intelligence/Academic Achievement (As assessed by school)</th>
<th>Social Class/Home (As assessed by school)</th>
<th>Behaviour Checklist Match Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exp. 1</td>
<td>Boy</td>
<td>14.11</td>
<td>Poor</td>
<td>Similar</td>
<td>122</td>
</tr>
<tr>
<td>Control 1</td>
<td>Boy</td>
<td>15.1</td>
<td>Poor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. 2</td>
<td>Boy</td>
<td>14.2</td>
<td>Poor</td>
<td>Similar</td>
<td>138</td>
</tr>
<tr>
<td>Control 2</td>
<td>Boy</td>
<td>14.1</td>
<td>Poor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. 3</td>
<td>Boy</td>
<td>15.5</td>
<td>Poor</td>
<td>Similar</td>
<td>135</td>
</tr>
<tr>
<td>Control 3</td>
<td>Boy</td>
<td>15.2</td>
<td>Poor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. 4</td>
<td>Girl</td>
<td>15.2</td>
<td>Average</td>
<td>Similar</td>
<td>79</td>
</tr>
<tr>
<td>Control 4</td>
<td>Girl</td>
<td>15.5</td>
<td>Average</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. 5</td>
<td>Boy</td>
<td>15.0</td>
<td>Below Average</td>
<td>Similar</td>
<td>84</td>
</tr>
<tr>
<td>Control 5</td>
<td>Boy</td>
<td>15.3</td>
<td>Below Average</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. 6</td>
<td>Boy</td>
<td>14.6</td>
<td>Average</td>
<td>Similar</td>
<td>149</td>
</tr>
<tr>
<td>Control 6</td>
<td>Boy</td>
<td>13.11</td>
<td>Average</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. 7</td>
<td>Girl</td>
<td>15.6</td>
<td>Average</td>
<td>Similar</td>
<td>150</td>
</tr>
<tr>
<td>Control 7</td>
<td>Girl</td>
<td>15.2</td>
<td>Average</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. 8</td>
<td>Girl</td>
<td>14.3</td>
<td>Above Average</td>
<td>Similar</td>
<td>137</td>
</tr>
<tr>
<td>Control 8</td>
<td>Girl</td>
<td>14.1</td>
<td>Above Average</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Pupil Pairs 9 - 15 were rejected, either because the experimental pupil had been referred to the Unit for reasons other than disruptive behaviour (i.e. truancy) or because no satisfactory match was found.

Note on matching Experimental Pupils and Control Pupils for the Pilot Study.

Schools were asked to indicate whether or not the pupils came from similar home backgrounds in respect of (a) geographic location, such as a particular housing estate, and (b) home circumstances, such as a one parent family. In all cases, the schools were able to confirm that the home backgrounds of matched pairs of pupils were similar in these respects.

Schools were further asked to indicate the level of academic achievement of the experimental pupil on a scale Poor, Below
In all cases the matched control pupil was, in the considered opinion of the school, able to be placed on the same point on the scale as the experimental pupil. IQ scores and/or Reading Age were made available by the school in support of their assessment.

(2) Sample of 14 pairs of pupils, where the BSAG and Behaviour Checklist for the Referred Pupils were completed by Both Unit Staff and Teachers from the Referring Schools.

<table>
<thead>
<tr>
<th>Pupil Pair No.</th>
<th>Sex</th>
<th>Age (years and months)</th>
<th>Intelligence/ Academic Achievement (As assessed by the school)</th>
<th>Social Class/ (As assessed by the school)</th>
<th>Match</th>
<th>Behaviour Checklist Score</th>
<th>Staff Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exp. 1</td>
<td>Girl</td>
<td>15.10</td>
<td>Above Average</td>
<td>Similar</td>
<td>46</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>Control 1</td>
<td>Girl</td>
<td>15.7</td>
<td>Above Average</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. 2</td>
<td>Boy</td>
<td>10.4</td>
<td>Below Average</td>
<td>Similar</td>
<td>13</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>Control 2</td>
<td>Boy</td>
<td>10.6</td>
<td>Below Average</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. 3</td>
<td>Boy</td>
<td>11.8</td>
<td>Above Average</td>
<td>Similar</td>
<td>2</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Control 3</td>
<td>Boy</td>
<td>12.2</td>
<td>Above Average</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. 4</td>
<td>Boy</td>
<td>11.2</td>
<td>Below Average</td>
<td>Similar</td>
<td>0</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Control 4</td>
<td>Boy</td>
<td>11.1</td>
<td>Below Average</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. 5</td>
<td>Boy</td>
<td>13.9</td>
<td>Poor</td>
<td>Similar</td>
<td>5</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>Control 5</td>
<td>Boy</td>
<td>13.4</td>
<td>Poor</td>
<td>(Parents separated)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. 6</td>
<td>Boy</td>
<td>13.6</td>
<td>Average</td>
<td>Similar</td>
<td>36</td>
<td>94</td>
<td></td>
</tr>
<tr>
<td>Control 6</td>
<td>Boy</td>
<td>13.8</td>
<td>Average</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. 7</td>
<td>Boy</td>
<td>15.11</td>
<td>Poor</td>
<td>Similar</td>
<td>131</td>
<td>183</td>
<td></td>
</tr>
<tr>
<td>Control 7</td>
<td>Boy</td>
<td>15.7</td>
<td>Poor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. 8</td>
<td>Boy</td>
<td>13.1</td>
<td>Poor</td>
<td>Similar</td>
<td>9</td>
<td>142</td>
<td></td>
</tr>
<tr>
<td>Control 8</td>
<td>Boy</td>
<td>13.8</td>
<td>Poor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. 9</td>
<td>Boy</td>
<td>16.2</td>
<td>Average</td>
<td>Similar</td>
<td>0</td>
<td>89</td>
<td></td>
</tr>
<tr>
<td>Control 9</td>
<td>Boy</td>
<td>15.9</td>
<td>Average</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. 10</td>
<td>Boy</td>
<td>15.7</td>
<td>Poor</td>
<td>Similar</td>
<td>24</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Control 10</td>
<td>Boy</td>
<td>15.11</td>
<td>Poor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. 11</td>
<td>Boy</td>
<td>16.1</td>
<td>Poor</td>
<td>Similar</td>
<td>227</td>
<td>234</td>
<td></td>
</tr>
<tr>
<td>Control 11</td>
<td>Boy</td>
<td>15.10</td>
<td>Poor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. 12</td>
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<td>13.5</td>
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</table>
Note on matching Experimental Pupils and Control Pupils for the sample of 14 pairs of pupils where the BSAG and Behaviour Checklist for Referred Pupils were completed by both Unit staff and teachers from the referring schools.

Schools were asked to indicate whether or not the pupils came from similar home backgrounds in respect of (a) geographic location, such as a particular housing estate, and (b) home circumstances, such as a one parent family. In all cases, except in respect of pair number 5, the school were able to confirm that the home backgrounds of matched pairs of pupils were similar in these respects. In the case of pair number 5, both pupils came from families where the mother and father had separated, but the separation was more recent in respect of the experimental pupil.

Academic Achievement is indicated on the scale Poor, Below Average, Average, Above Average, as for the Pilot Study.

The Experimental pupil 13 is the only pupil in the research programme who is of Afro-Asian origin. The 'matched' control pupil is not of Afro-Asian origin.

(3) The Remaining 31 pairs of pupils, comprising the Research Programme

<table>
<thead>
<tr>
<th>Pupil Pair No.</th>
<th>Sex</th>
<th>Age (years and months)</th>
<th>Intelligence/Academic Achievement (As assessed by school)</th>
<th>Social Class/Background Match Checklist Score (As assessed by school)</th>
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<td>15.7</td>
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<td>Control 17</td>
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<td>Similar (both one parent families)</td>
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<tr>
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<td>Girl</td>
<td>15.1</td>
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Pupil pairs 46 - 50 were rejected because one pupil became delinquent; two pupils were referred to the Unit for reasons other than disruptive behaviour; one pupil could not be matched; one pupil's records were lost by the referring school.

Note on matching the remaining 31 pairs of pupils comprising the Research programme.

Behaviour Checklists were completed prior to intervention by the Unit, by teachers from the Units, and it can be accepted that the match score might, therefore, have been higher if these Checklists had been completed by teachers from the referring schools.

Schools were asked to indicate whether or not the pupils came from similar home backgrounds in respect of (a) geographic location, such as a particular housing estate, and (b) home circumstances, such as a one parent family. The schools were able to confirm that the home backgrounds of matched pairs of
pupils were similar in these respects, with the following exceptions:

i) The experimental and control pupils comprising pair number 18 both came from one parent families, but it was probable that a strict application of the Registrar General's criterion for Social class would have shown some difference in social class background for this pair of pupils.

ii) Experimental pupil number 20 was taken into care at the same time that the pupil was referred to an off-site special unit. Control pupil number 20 also experienced 'severe home difficulties', but was not taken into care.

iii) Experimental pupil number 22 was taken into care at the same time that the pupil was referred to an off-site special unit. Control pupil number 22 also experienced 'home difficulties', but was not taken into care.
Appendix VI

Example of Statistical Procedures
Example of Statistical Procedures

The Statistical Procedures relating to the Sample of the Main Study where 'before-intervention' tests for the experimental pupils were completed by teachers from the referring schools, taken together with the pilot Study.

N = 22 matched pairs of pupils.

BSAG: Pre- and Post intervention assessments relating to the Experimental Pupils, using the Correlated t test

\[
t = \frac{\bar{d}}{\sqrt{\frac{\sum (d - \bar{d})^2}{n(n-1)}}}
\]

\[
t = \frac{-7.5455}{\sqrt{\frac{1395.7279}{22(22-1)}}}
\]

\[
t = \frac{-7.5455}{1.7381} = -4.3412
\]

With 21 degrees of freedom reject \( H_0 = 0.002 \)

BSAG: Pre- and Post intervention assessments relating to the Control Pupils, using the Correlated t test.

\[
t = \frac{7.1818}{\sqrt{\frac{2395.2738}{22(22-1)}}}
\]

\[
t = \frac{7.1818}{2.2769} = 3.1542
\]

With 21 degrees of freedom reject \( H_0 = 0.01 \).

Behaviour Checklist: Pre- and Post intervention assessments relating to the Experimental Pupils, using the Correlated t test.

\[
t = \frac{-20.5909}{\sqrt{\frac{3945.3184}{22(22-1)}}}
\]
\[ t = \frac{-20.5909}{2.9223} = -7.0461 \]

With 21 degrees of freedom reject Ho \(= 0.002 \).

Behaviour Checklist: Pre- and Post intervention assessments relating to the Control Pupils, using the Correlated t test.

\[ t = \frac{-0.7727}{\sqrt{\frac{3235.2673}{22(22-1)}}} \]

\[ t = \frac{-0.7727}{2.6463} = -0.2919 \]

With 21 degrees of freedom accept Ho.

BSAG: Pre-intervention assessments comparing Experimental Pupils and Control Pupils, using the Independent t test.

\[ t = \frac{\bar{X}_A - \bar{X}_B}{\sqrt{\left[ \frac{\sum(X^2)}{N_A} - \left( \frac{\sum X^2}{N_A} \right)^2 \right] + \left[ \frac{\sum(X^2)}{N_B} - \left( \frac{\sum X^2}{N_B} \right)^2 \right]} \div (N_A - 1) + (N_B - 1)} \]

\[ t = \frac{23.182 - 22}{\sqrt{\frac{6.365^2}{22} + \frac{5.309^2}{22}}} \]

\[ t = \frac{1.182}{1.767} = 0.669 \]

With 42 degrees of freedom accept Ho.
BSAG: Post-intervention assessments comparing Experimental Pupils and Control Pupils, using the Independent t test.

\[
t = \frac{29.182 - 15.818}{\sqrt{\frac{10.857^2}{22} + \frac{13.680^2}{22}}}
\]

\[
t = \frac{13.364}{3.723} = 3.589
\]

With 42 degrees of freedom reject Ho: 0.002.


\[
t = \frac{41.409 - 36.818}{\sqrt{\frac{21.345^2}{22} + \frac{21.274^2}{22}}}
\]

\[
t = \frac{4.591}{6.425} = 0.715
\]

With 42 degrees of freedom accept Ho.


\[
t = \frac{40.318 - 21.364}{\sqrt{\frac{22.801^2}{22} + \frac{26.296^2}{22}}}
\]

\[
t = \frac{18.954}{7.420} = 2.554
\]

With 42 degrees of freedom reject Ho: 0.02.
Appendix VII

Raw Data relating to Pupils' Assessment Scores
Raw Data relating to the experimental and control pupils, before and after intervention by a Local Education Authority Off-Site Special Unit, assessed by Bristol Social Adjustment Guides and Behaviour Checklist

Experimental Pupils, assessed by BSAG
Before and After Intervention by Unit

Raw Scores

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* Assessment completed by teachers from referring schools, as opposed to teachers from the receiving Units. All other scores result from assessments carried out by teachers from the Units.
Control Pupils, assessed by BSAG
Before and After Intervention by Unit

Raw Scores

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**Experimental Pupils, assessed by Behaviour Checklist**

**Before and After intervention by Unit**

### Raw Scores

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*Assessment completed by teachers the from referring schools, as opposed to teachers from the receiving Units. All other scores result from assessments carried out by teachers from the Units.*
Control Pupils, assessed by Behaviour Checklist
Before and After Intervention

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